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PACIFIC FISHERMAN

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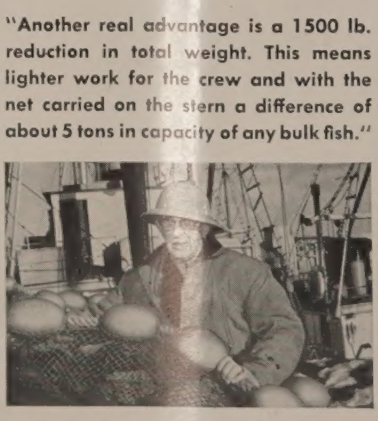

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PACIFIC FISHERMAN

Vol. 54 No. 5

APRIL 1956

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A MILLER FREEMAN PUBLICATION

What Does Soviet Blast at Japan's Fishing Suggest?

● Japan "may propose to the U.S.S.R. to enter negotiations on salmon fishing rights in the northern Pacific."

This is a statement made by Foreign Ministry Councilor Shinsaku Hogen before the Foreign Affairs Committee of the Lower House of the Japanese Diet, according to report in the Tokyo *Mainichi.*

Character of the negotiations contemplated, and whether they might be more than bilateral, is not indicated.

The statement followed close on the heels of an announcement by Radio Moscow that the Soviet cabinet has ordered "urgent interim measures" to stop Japanese fishermen from catching salmon off the Pacific Coast of Russia, where Radio Moscow declared "the large numbers of nets placed by Japanese fishing craft in a number of areas almost completely bar the path of the salmon to the rivers where they spawn."

The radio went on: "The U.S.S.R. Council of Ministers therefore has directed . . . urgent interim measures to stop the rapacious catching of salmon on their migration routes, pending the concluding of a relative international agreement on the preservation of the aforementioned stocks of salmon and the regulation of their catch."

That the Soviet may be considering that the suggested "relative international agreement" might be more than bilateral is indicated by the further comment:

"This situation cannot fail to affect world food supplies and to harm not only the people of the Soviet Union but *also the people of other countries, including Japan.*" (Emphasis supplied by editor.)

Japanese spokesmen flatly denied the charge that their fishing poses a threat to the Asian salmon runs; or that their operations have been conducted in anything except strict observance of international law and well outside territorial waters of the Soviet Union.

● The Soviet Union did not dismiss the matter with its initial blast at the Japanese and their fishing methods. On March 7, writing in *Pravda,* Prof. D. Moisseev, vice director of the U.S.S.R. Institute of Scientific Research into Fishing Grounds and Oceanography, renewed the attack.

He declared that Japanese fishing off Kamchatka before the war had so depleted the runs of salmon that the resource still showed the effects.

The professor said he regarded the Japanese methods as all the more inadmissable because the canned salmon was intended for export rather than for home consumption.

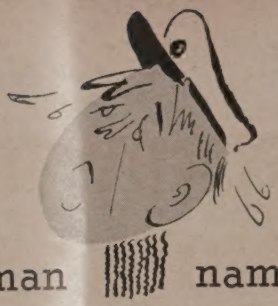
Moisseev concluded by saying "it is absolutely clear that it is necessary to take urgent steps to stop this carnage of salmon".

The matter is a sensitive one at the present time, when the negotiations between Japan and the U.S.S.R. have been in progress in London since last June, seeking a peace treaty between the two countries.

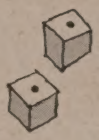
There is good reason to believe that one of the most ardently-sought objectives of the Japanese is recovery of South Sakhalin Island and the Kuriles. There can be no doubt that the Japanese believe this possible of attainment, and that the peace treaty negotiations are the most likely means of bringing it about.

● The blunt declaration of the Soviet Council of Ministers came only a short time after the editorial on Page 1 of *Pacific Fisherman* for March, 1956, was written. Titled: "Is Soviet Union Making Its Move on High Seas Fishing?"

The editorial seems to have been sharp in its timing, and close to the mark.

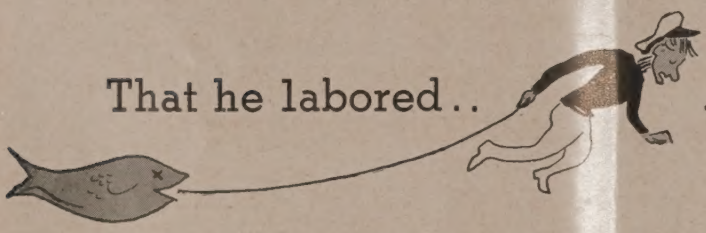


There was a young man named Sam Etting

Who gambled  with second rate netting.

When it became plain .....

That he labored.. ...in vain



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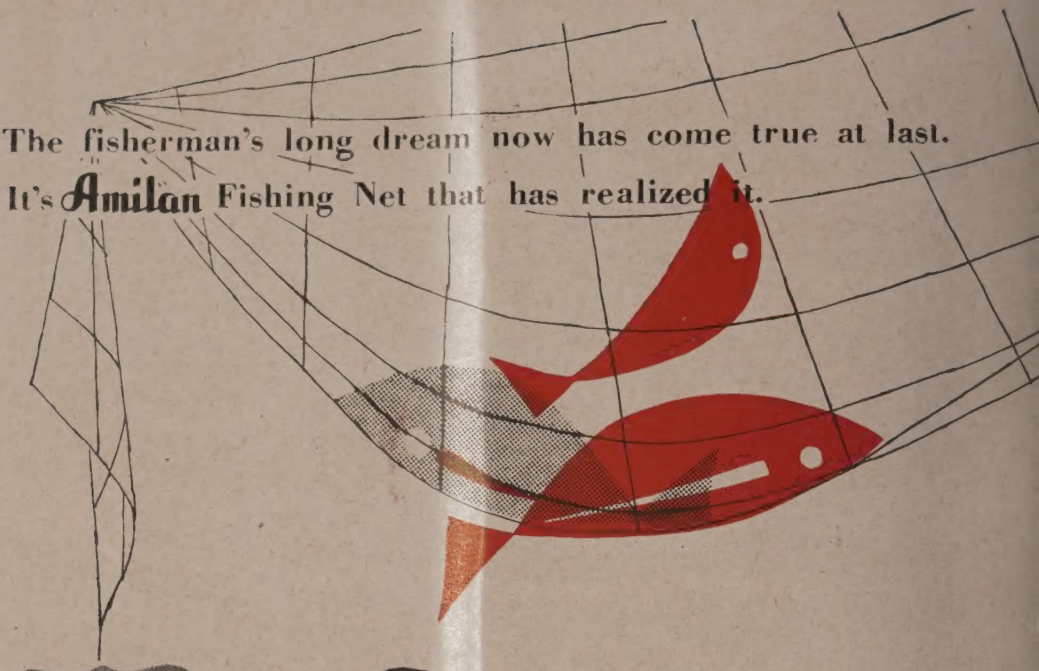

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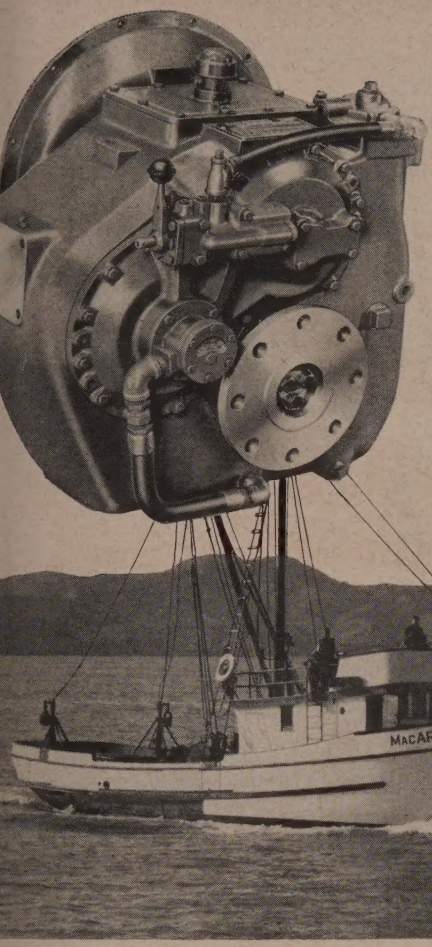
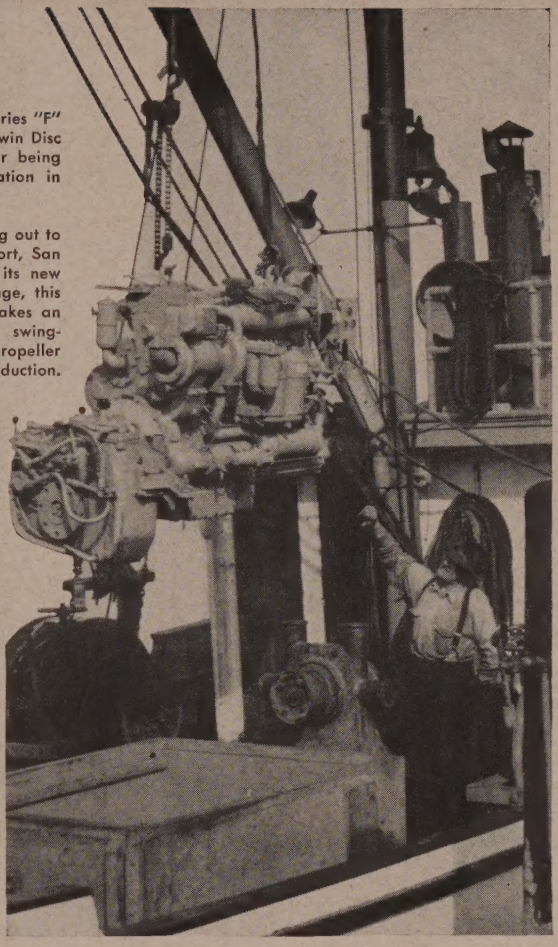


The new Cat D337 Series "F" Marine Engine and Twin Disc MG-511 Marine Gear being prepared for installation in the *MacArthur*.

The *MacArthur* putting out to sea from its home port, San Francisco Bay. With its new marine engine package, this 56-ft. fishing boat makes an estimated 10 knots, swinging a 56" x 38" propeller through a 4.4:1 reduction.



lew Twin Disc MG-511 Marine Gear installed vith first CAT Turbocharged Marine Engine!

When the 56-ft. fishing boat *Mac-thur* had its old engine replaced, ners Reidar Enge and G. J. ndtke chose for their new power kage the first-built Caterpillar 37 Series "F" (turbocharged) rine Engine and the new Twin c MG-511 Marine Reverse and duction Gear.

Selection of the Twin Disc MG-511 rine Gear was a "natural" in this tallation, where compactness and nt weight were all-important. For MG-511 is only 17⅞" from fly-eel housing flange to propeller ft flange and weighs only 950 lbs.! Besides compactness and light ight, the Twin Disc MG-511 offers many other advantages and money-saving features.

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- **Exceptionally heavy-duty anti-friction thrust bearings.**

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For further information on the MG-511, write today to Twin Disc Clutch Company, Racine, Wisconsin. Request Bulletin 307.

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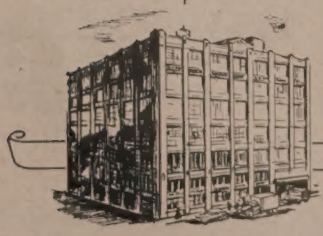

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B. C. Herring Catch Hits All-Time High

British Columbia fishermen hartted the greatest volume of herring r recorded on this coast during season which ended March 10, d it was expected that by the time the catches were tallied the total uld be close to 250,000 tons.

Two weeks before the season ended imated landed value of the herring ch was estimated at more than ,000,000, far in excess of any preus figure. Average catch in recent ars has been about 175,000 tons season.

An unusually heavy contributor to total was the Queen Charlotte ands area, where 80,000 tons of rring had been taken by March 3. irty-four boats accounted for 3375 ns in one day, and this was not high record for the season beuse bigger hauls were taken when more boats were on the grounds. Fifty-eight seiners were in operation on the most active day.

No quota was imposed on the Queen Charlotte area this year, and with several days of fishing remaining at the time this is written there was no telling what the final total would be.

About 4,000,000 imperial gallons of herring oil had been produced by March 3, and nearly 39,000 tons of herring meal.

The tremendous school of herring in the Queen Charlotte area provided the season's most spectacular fishing, but no record-smashing individual sets were made, the biggest hauls being 600 tons or less. The area accounted for far more herring than ever previously reported at any time for any area.

Salmon Unions Set Sights High With Pension Plans

Key contracts of salmon canning ions with the industry went under gotiation shortly before the end of bruary.

A beginning had barely been made presstime of this issue and, while was known in a general way what e Alaska Fishermen's Union and the achinists Union were asking, there as no basis on which to forecast obable outcome.

One thing could be said for certain: e unions had their sights set high. *Pensions* were the dominant note in the new demands. Cost of the Alaska Fishermen's Union pension program, as presented, was figured at about 15 cents per case; and there was a matter of a 10% across-the-board raise in wages and overtime rates in addition; plus other miscellaneous ups.

The Machinists' pension plan called for a payment of $1.60 per man day for a fixed season into the fund. This payment, taken together with a broad wage increase demand and other benefits, was figured by analysts as equivalent to a 50% increase in machinist wage costs.

• *WEATHER*—Reports from various parts of Alaska indicate an extremely severe winter along the coast.

Loss of salmon spawn due to exposure and freezing of the gravels in Southeast Alaska was counted as a very serious possibility.

In Central Alaska, and notably in the Copper River area, snowfall was very heavy and immense masses of ice had formed. This was expected to present something of a problem for the fishermen when the ice starts going out of the Copper River and across the Flats of its delta.

• *REJECTED* — Request of Seattle and Bellingham purse seiners for relaxation of the prohibition against power blocks and drum seine gear in Southeast Alaska — directed through Senator Warren G. Magnuson — was rejected by John L. Farley, Fish and Wildlife Service director, who wrote the senator:

"Drum seines and power blocks are prohibited only in Southeastern Alaska, where a rehabilitation program is in progress to restore the depleted Pink salmon runs. These appliances are not prohibited any place else in Alaska where purse seines may operate. Southeastern Alaska, in 1956, will be subjected to the same severe regulatory restrictions that have been in effect the past two years.

"This is not to be construed as a permanent prohibition on these mechanical devices; when the Pink salmon runs are restored and the additional restrictions are lifted, we anticipate that the technological advances in purse seining now permitted elsewhere in Alaska may also be used in Southeastern Alaska. . . .

"Conservation of salmon is affected by the use of power blocks and drum seines because of their greater efficiency of operation. The Canadian Department of Fisheries has reported that drum seines can make approximately twice as many sets as conventional gear in the same period of time. . . . The power block is equally efficient. Tested in British Columbia in 1955, it was concluded that with the aid of this mechanical device eight sets could be made in the time required for four sets using the conventional method."

Van Camp's Carribean Move Tops Tuna News

• Headlining tuna industry news is the purchase by Van Camp Sea Food Company of the National Packing Company's plant in Ponce, Puerto Rico.

The Puerto Rican plant has been operated by the South Pacific Canning Co., Long Beach, whose general manager is M. D. Marsh. The Long Beach cannery of the South Pacific company was recently torn down to make way for a freeway. However, T. A. Halfhill, sales manager of the company, says the organization will continue in the fish canning industry with *Royal Pacific* and *Halfhill* tuna labels and *Sea Gold* sardines, mackerel and clams. Home office is in Long Beach, Calif.

Gilbert C. Van Camp, president of the Van Camp enterprise, states his company had purchased all of National's common stock. The decision, he says, to purchase the cannery is based on *Chicken of the Sea's* estimated need for additional production to meet expanding markets. W. D. Moore, Jr., who has been associated in the direction of the American Samoa Van Camp tuna canning operations, and who is quality control manager for Van Camp, will coordinate the Puerto Rican operations.

The cannery customarily employs 200 and has a packing capacity of about 30 tons of fish per day. Early in the history of the National Packing Company's operations, which began in 1953, a fleet of about five or six tuna clippers delivered to Ponce.

• *EYES ON BILLS*—In early March Southern California fish canners were following closely the various bills introduced in congress concerning fisheries. Canners were cautious in their comments, and their stand on the contents of these bills.

Charles R. Carry, executive director of the California Fish Canners group association, states that his organization will support legislation that establishes a strong national fishery policy and strengthens the status of the commercial fisheries in the federal government. Whether or not the Magnuson-Kuchel bill S. 3275, will have the support of the Association is the 64-dollar question.

One of the most interesting facets of S. 3275, as it concerns Southern California fisheries, is the provision that close cooperation is to be maintained by the United States with Mexico through fisheries agreements for the conservation and utilization of the stocks of food fish and shellfish which inhabit the waters of the Continental Shelf.

Following on the heels of the California Assembly Interim Committ hearings on Fish and Game in Pedro in January came the one-meeting of the Senate Interim C mittee in February to hear the vi points of commercial fisheries, as as sportsfishermen, on proposed le lation involving both interests.

California Fish Canners Asso tion report the filing of a statem in early March of opposition to 5550 with the House Ways and Me Committee on the grounds of "unsatisfactory experience with re rocal trade agreement legislat which provides the State Departm with excuse for adherence to GAAT, and now the Organization Trade Cooperation, and (2) beca of the set-aside of constitutional quirements that congress regulates foreign commerce of the Un States."

Japan Orders Controls On Salmon Long-Lining

• Long-lining for salmon has attained a degree of success which this spring led the Japanese government to rule that in future these operations in waters south of the 48th parallel, North Latitude, shall be conducted only under governmental permit. Hitherto such fishing has not been subject to restriction of any sort.

Fishing for salmon by means of floating long-lines has been practiced for a number of years by a fleet of small vessels working out of ports in Miyagi Prefecture. This spring the Japanese government announced that an official research vessel had been studying these operations since 1952 and had reported that "the surface long-line has excellent merits in many respects, and may be applicable to pelagic operation.

Although this statement was somewhat tentative, and made in an "ad interic" or "progress report" publication, it produced feverish interest among the operators of small boats and launched a nation-wide rush to participate in high seas long-lining during the 1956 season.

The problem promised to become acute and the Fishery Agency of the government referred it to the Central Fisheries Adjustment Deliberation Council.

As result of the investigation made by the Council, and in view of its policy of conservation of the oc salmon resources, the Fishery Age announced a new program of pe control for fishing gear *other gillnets* in the Pacific south of North Latitude.

• Gist of the report of the Cen Fisheries Adjustment Deliberat Council was that:

1. Fishing vessels of more than gross tons wishing to engage in mon fishing in waters south of North Latitude with gear other salmon gillnets must secure pe from the Minister of Agriculture Forestry.

2. Fishing vessels of less than gross tons must secure permit for l line (or seine) gear in these wa south of 48° from the governor of adjacent prefecture, which shall with the matter in the light of l conditions.

Regulations in addition to these mit requirements will be made pu in April. These are expected to spe seasons and areas of operation long-line (and perhaps seine) fish as otherwise extreme congestion c be expected, if the newcomers wer undertake to mingle their operat with those of the already nume gillnetters.

Vhat's in the NFI Spotlight?

QUALITY and LEGISLATION

otlight of interest at the National ries Institute convention at i Beach in mid-April seems cer- o fall primarily on two topics:

oduct quality; and
ngressional action.

e first subject has a large place e convention program. The sec- will have an even larger place official convention conversation.

uality; and how to attain it; how easure it; how to merchandise it; o enforce it—this has long been emost subject for the national ies industry and its national ute.

is year the subject is of special st to the West Coast element ne industry because a Pacific er, E. A. Ruthford, vice presi- for sales of the San Juan Fishing cking Co., Seattle, is the chair- of the national quality committee F.I.

rough the year since the New ns convention he and his com- e have developed a new approach e study of fish products quality gh the medium of the annual . conventions. Accordingly, a procedure is being followed this ; a procedure that will come ition at the convention in inte- l reports of regional findings.

e cuttings and examinations of roducts are being conducted by ns in advance of the convention. at Seattle March 14 a team of -dozen qualified examiners from ompanies, together with tech- ists from the University of ington School of Fisheries, met e technological laboratories of chool and examined the samples ted by the staff of the U. S. and Wildlife Service Technologi- aboratory at Seattle.

ese samples, drawn from the cts of Region V operators, were ined and graded in the frozen and then after thawing.

e product examinations this year eing made on the basis of sam- drawn at the wholesale level, than purchases made in retail . Moreover, the size of each dual sample was much larger— ost instances a full case.

mples of breaded products, and cularly fish sticks, are being d on the basis of the proposed tary standards being developed by the Fish and Wildlife Service laboratories and the National Fisheries Institute committees on breaded shrimp and fish sticks.

Product categories in the national judging include: Salmon steaks, Halibut steaks, Pacific Ocean Perch fillets, Sole fillets, Shrimp, Breaded shrimp, Fish sticks, Cod fillets, Haddock fillets, Flounder fillets, Ocean Perch fillets.

● Pacific Coast members of the Institute head three of the important committees: Finance, Resolutions and Quality.

Chairmanship of the committee dealing with the means by which the Institute is supported is entrusted to Lloyd Turnacliff of the Meredith Fish Co., Sacramento.

Quality chairman, as mentioned, is Mr. Ruthford.

Resolutions committee, one of the key agencies of the Institute, which carefully screens proposals for official action, operates under the chairmanship of Elmo C. Jack of the E. C. Jack Brokerage Co., Los Angeles.

Attendance of Pacific Coast members of the Institute promises to be excellent, with at least 60 from the West Coast registered at presstime. Most of them will be accompanied by their wives.

● *LEGISLATIVE* matters unquestionably will command a great deal of interest at the convention, although it is not to be expected that they will have much part in the official program, in line with the Institute's traditional neutrality on a number of the involved, particularly those concerned with tariffs.

On the other hand, with Congress entering the last two months of the Election Year sessions; and with such a catch of fish bills in the committee bins as the Potomac has never seen before, what's - gonna - happen? and to-which? and to-who? are bound to be prime questions at Miami Beach.

There'll be talk of the Tariff Commissions's third-round with the fillet problem—that's for sure.

Bob Wilson's HR 8001, which was me-tooed by some 27 other congressmen, is bound to be a subject of discussion in the convention lobbies. NFI followed its policy of taking no action on this bill, although following its progress closely and studying its implications. Individual members of course will have lots of ideas to expound.

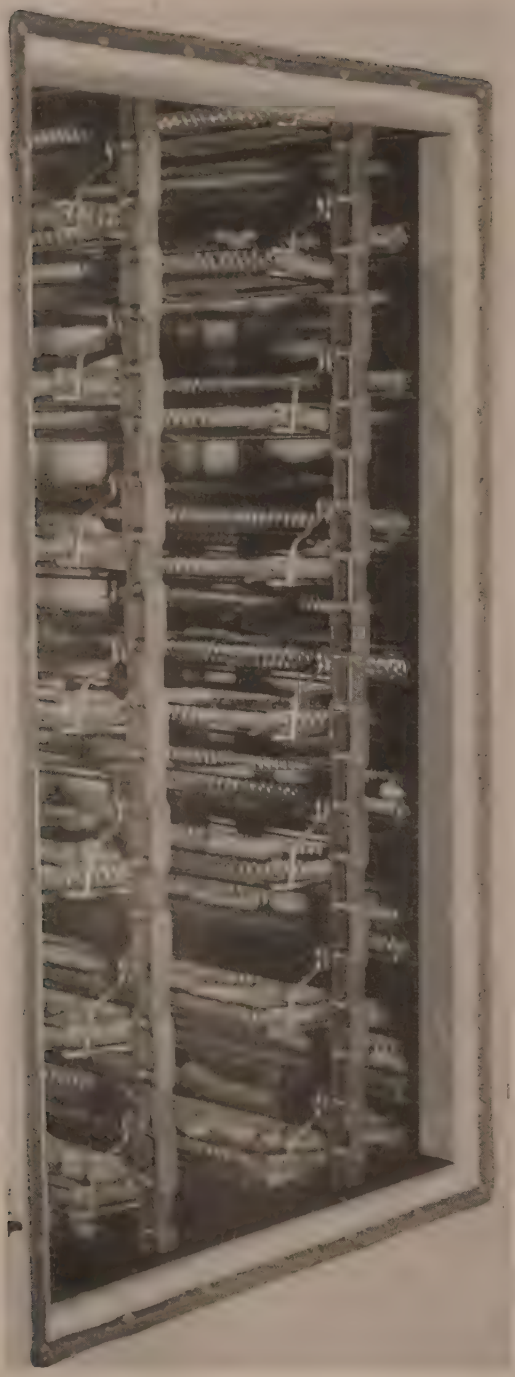
The Magnuson measures with their new approach: an independent salaried commission to handle all federal fisheries operations, after the style of the Atomic Energy Commission, but with the added authority to impose restrictions on imports and to issue bonds for making loans to fishermen and operators, is sure to be talked-over quite fully.

Whether resolutions backing either of these legislative approaches is offered in the form of resolutions is something to be watched closely. Institute policy on tariff matters could come-up for an attack from the flank under some such strategy.

Trap Bill Survey Made in Alaska

A survey by the Alaska Department of Fisheries to obtain the reactions of Alaska fishermen to the amendments to Delegate Bartlett's trap bill, H. R. 242, as proposed by Secretary of the Interior Douglas McKay, showed fishermen at Wrangell, Ketchikan, Petersburg and Juneau unanimous in opposition to the proposal to set up a ten year period for elimination, and voted unanimous approval to a straight five year prohibition. The survey also showed Ketchikan fishermen favoring December 31, 1960 the final date, and Wrangell, Petersburg and Juneau compromising on December 31, 1961.

Taking a Peek at *4 Fishermen* in California



Open **Door** in this Doughnut Corporation of America cooling unit in the Santa Rosa plant of Fulham Brothers of California shows freshly fried fish sticks cooling as they travel in stainless steel basket trays up-and-down-and-through this refrigerated cooler to emerge precisely-conditioned for packaging and freezing. The trays are loaded automatically from the stainless steel conveyors which carry the sticks through and from the frying oil, whose temperature is kept carefully controlled by instruments.

● Santa Rosa is many miles from the sea, but one of the most modern and productive fish stick plants on the Pacific Coast is located there. The operation is that of Fulham Brothers of California, producers of *4 Fishermen* Brand seafoods.

It is a wholly-owned subsidiary of Fulham Brothers of Boston, one of the nation's prime producers of seafoods. Management is in the hands of the third generation of Fulhams, with John N. Fulham, Jr., president of both companies. Gaylord E. "Gay" Lewis is general manager of Fulham Brothers of California.

Why did Fulham Brothers pick Santa Rosa, a beautiful but primarily agricultural city as a site for their modern fish stick plant?

"It's like this", Mr. Lewis told a *Pacific Fisherman* editor: "We wanted a plant near modern freezing and storage facilities, on a spur track, an adequate supply of intelli labor. All of these factors are pre in Santa Rosa.

"Our plant is adjacent to a p of the National Ice & Cold Sto Co. where we lease tunnel free facilities that give us capacity u 90 tons per day. We also have a able storage space for 2,500 pounds, which gives us plenty of way for both our raw material our finished product.

"We bring our raw material fish sticks—cod, from four of own receiving, processing and fi ing stations in New England, N foundland and Nova Scotia. Ou this plant we distribute not only *4 Fishermen* Brand fish sticks but our *4 Fishermen* Brand cooked lops, frozen 1-lb. consumer pack of fillets of cod, haddock, flour sole, perch, and catfish".

● *PRODUCTION PROCESS*— stick material comes to the S Rosa plant by rail, direct to the storage facilities of the ice comp which are but a few steps away Fulham Brothers plant. The packed in cartons, is in 13½ blocks.

There the blocks meet a ba of six meat saws. A cut is first m for length—3½". These slabs conveyed to another saw that m a cut for width, ¾", and still an saw makes a cut for thickness—

Cutting is controlled by an matic timing device by which al other processes are linked so an flow is provided through the co thus maintaining an even tempera of the cooking oil.

The automatic processing de ment was all furnished by the Do

Four Steps for Four Fishermen

One of six saws where blocks of frozen cod fillets are cut to precise dimensions for **4 Fishermen** fish sticks.

Doughnut Corporation battering and breading machine prepares sawn sticks with carefully formulated and conditioned coat before cooking.

Precise cooking temperature and time are provided by this Doughnut Corporation of America continuous cooker for **4 Fishermen** fish sticks. Note the carbon dioxide nozzles above to snuff out possible flash fires.

Product Cooling is the function of this beautiful unit, manufactured by the Doughnut Corporation of America. Cooked fish sticks enter by the foreground conveyors and are carried slowly on stainless steel trays through the moving current of refrigerated air.

ke Breader Mix Division, Dough- Corporation of America and wnyflake breader and batter mixes used at the plant. The equipment sists of a dipper feed table, dip chine, automatic breader machine, rating chute, infeed conveyor to er, automatic fryer, stainless steel veyors, coolers, and packing table.

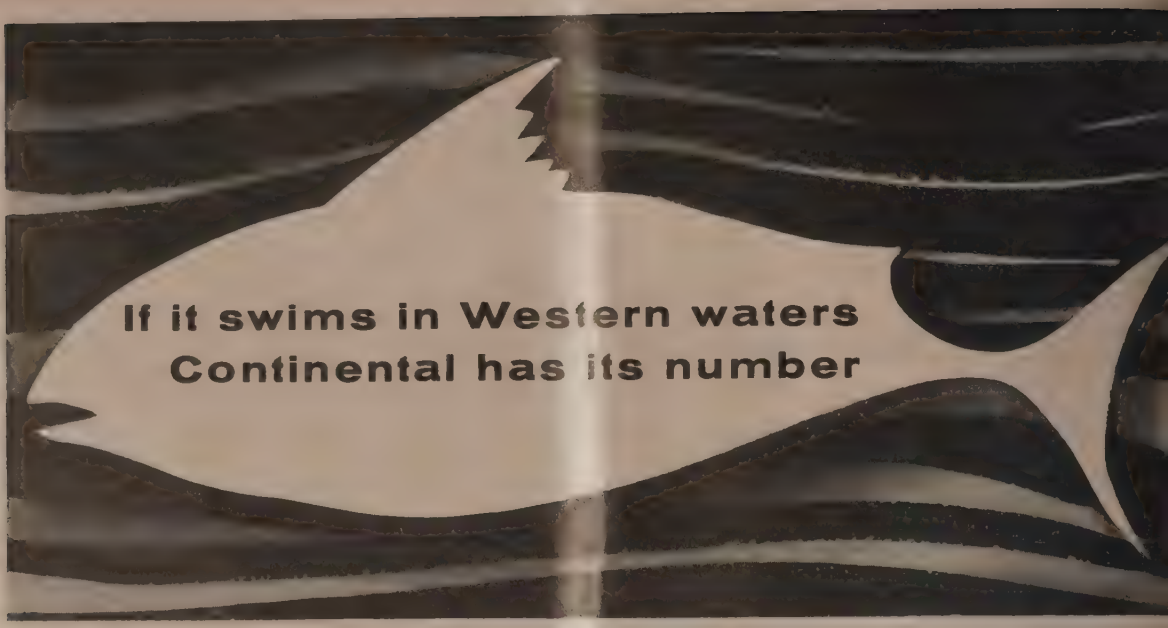
The fish sticks are placed manu- on the stainless dipper feed table, either side of the moving belt, and onto the belt by hand. This in- es the product moving through the

per in a consistent manner, and vents overloading the dip and ader units.

After proper mixing the batter is ced in a dip pan of the dip ma- ne, then pumped to the distributor top of the machine. The batter fills mall reservoir which rests over the veyor. The overflow forms a cur- n of batter through which the fish ks pass, being uniformly coated. The machine is equipped with a wer which provides a mild air blast remove excess batter from those ducts which retain more batter n necessary because of their sur- e texture. The air blast is adjust- e to meet varying batter consist- ies and products. Excess batter irculates.

After being thoroughly coated with ter, which is formulated with the lition of *Ac'cent* monosodium glu- nate, the conveyor carries the fish ks directly to the breader machine.

is consists of a revolving drum olding the breader mix) and a con- or to collect the breaded product d discharge it. The fish sticks are veyed to the drum where they are formly and completely coated with breader mix by a gentle tumbling ion. After thorough coating, the n sticks are picked up by the con- or and discharged from the drum.



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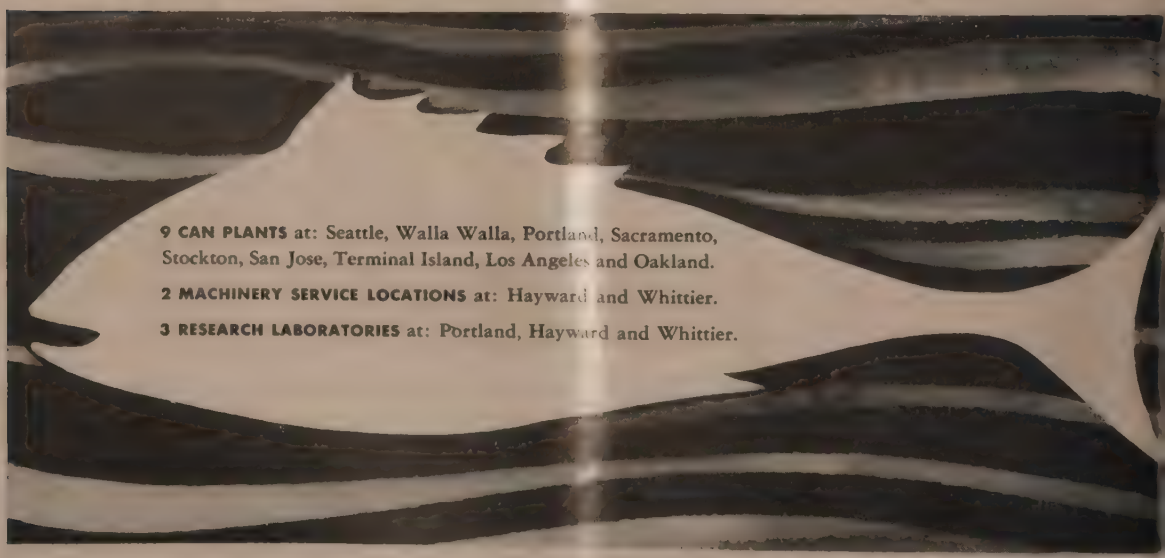

9 CAN PLANTS at: Seattle, Walla Walla, Portland, Sacramento, Stockton, San Jose, Terminal Island, Los Angeles and Oakland.

2 MACHINERY SERVICE LOCATIONS at: Hayward and Whittier.

3 RESEARCH LABORATORIES at: Portland, Hayward and Whittier.

AUTOMATIC FRYING — The ustable vibrating chute automati-ly feeds the fish sticks from the :ading machine to the fryer infeed ıveyor. The chute is powered with electric motor, and places the fish :ks on the infeed conveyor to elimi-te any need for manual labor at s point. The vibrator also removes :ess breading mix before the fish :ks are deposited in the fryer, pro-cing a more uniform product.

The fryer receives the fish sticks ɔm the conveyor and automatically ys them for 58 seconds at 375°F in rn oil. The heat of the corn oil is ntrolled thermostatically to main-

Fulham Brothers Sticks Packing

Filling cartons with fresh-cooked, fresh-cooled sticks as they come from the Doughnut Corporation cooler in the background.

Precise weight of each carton is checked electronically on this automatic scale, which rejected both over-weights and under-weights.

Brand labelling and wrapping is handled on this Package Machinery unit. In the background the trays of finished packages are racked for tunnel freezing.

Compact capacity features the Fulham Brothers plant at Santa Rosa, with its complete line of integrated fish stick machinery by Doughnut Corporation of America.

in an even heat throughout the day's n. The fryer is equipped with an tomatic CO_2 system to extinguish y flash fire. It also has a circu-ing oil system which maintains the me level of oil automatically.

After the cooking process the sticks e carried on stainless steel conveyors a 48′ cooler, where they are gently moved by a mechanical sweep arm to the conveyor feeding the pro-ıct into the cooling baskets. An ap-oximately equal amount of fish cks are deposited in each of the oling baskets. Suspended from ains that move up and down rough the cooler, the baskets at the scharge end are conveyed out of e cooler horizontally, facilitating sy packing. It is easily accessible r inspection.

The cooler is refrigerated to 40°F a York freon compressor, and the icks take 13 minutes to cool.

From the cooler the sticks are con-yed on a stainless steel belt to a ainless steel packing table where the sh sticks are packed by hand in two pes of cartons. Eighteen to a 14-oz. Economy" package, and 10 sticks the 8-oz. package. Cartons are pro-ded by Fibreboard Products Inc., d Marathon Corp.

The cartons pass through an elec-tronic scale which weighs the cartons between the packers and the wrapping machine, rejecting under and over-weight packages.

The packages are wrapped by a Package Machinery Corporation automatic wrapping machine in waxed paper wrappers, attractively lithographed. The 8-oz. wrappers are supplied by Marathon Corp. and are hard finish, high gloss type.

From the Package Machinery wrapping machine the cartons are put on racks and taken to the freezing

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nel. It is just 16 minutes from the e the first saw hits the block of zen cod until the carton of fish ks is deposited in the freezer, in ntainer Corp. shipping cartons.

The Santa Rosa plant of Fulham thers produces 16,000 of 8-oz. ts per shift, and 12,000-13,000 of -oz. units per shift, but 60% of time the plant is running on a -shift basis.

QUALITY CONTROL — One of most important phases of the lham Brothers operation is quality ntrol. "We have three girls, full e, in this department", said Mr. wis. "They are specially trained d have authority to shut down the oduction line if necessary.

"We check our oil twice a day in laboratory. Here is a regular chen stove, beside our standard oratory equipment. We reheat the evious days' product and check for vor and consistency. We check the vor of the breading, and the final t is to warm up the fish sticks in oven and see how they taste, be-se that's exactly the way the house-fe is going to get them."

Jack Helm, a University of Cali-nia graduate, with eight years ex-rience with a large vegetable oil mpany is plant superintendent.

William G. Lorenz is sales mana-, and directs the efforts of the g Crosby Minute Maid salesmen d brokers through whom *4 Fisher-n* Brand goods are distributed on Coast.

Mr. Lewis has had an extensive reer in the frozen food and sea-od business. He came with Ful-m Brothers when they expanded ir operations to cover the Pacific ast in 1953, and got sales underway the cooked and ready to eat pro-cts of the firm.

Previously he had worked for arine Products Co., San Diego, as national sales representative, and previously to that was with Topco Associates, Chicago, buying seafoods and setting up private label business.

The Santa Rosa plant is modern and well lighted and covers an area of about 20,000 sq. ft. For two shift operations, 105 people are employed.

Fulham Brothers of Boston, and also of California, where they have opened a modern fish stick plant at Santa Rosa, Luther Burbank's base. From the left: **Tom Fulham,** board chairman and vice president in charge of production; **John N. Fulham, Jr.,** president, in charge of marketing, sales and advertising; **Gerard A. Fulham,** treasurer, in charge of financing and general administration.

Gaylord E. Lewis, general manager of Fulham Brothers of California, Santa Rosa.

William G. Lorenz, sales manager, Fulham Brothers of California.

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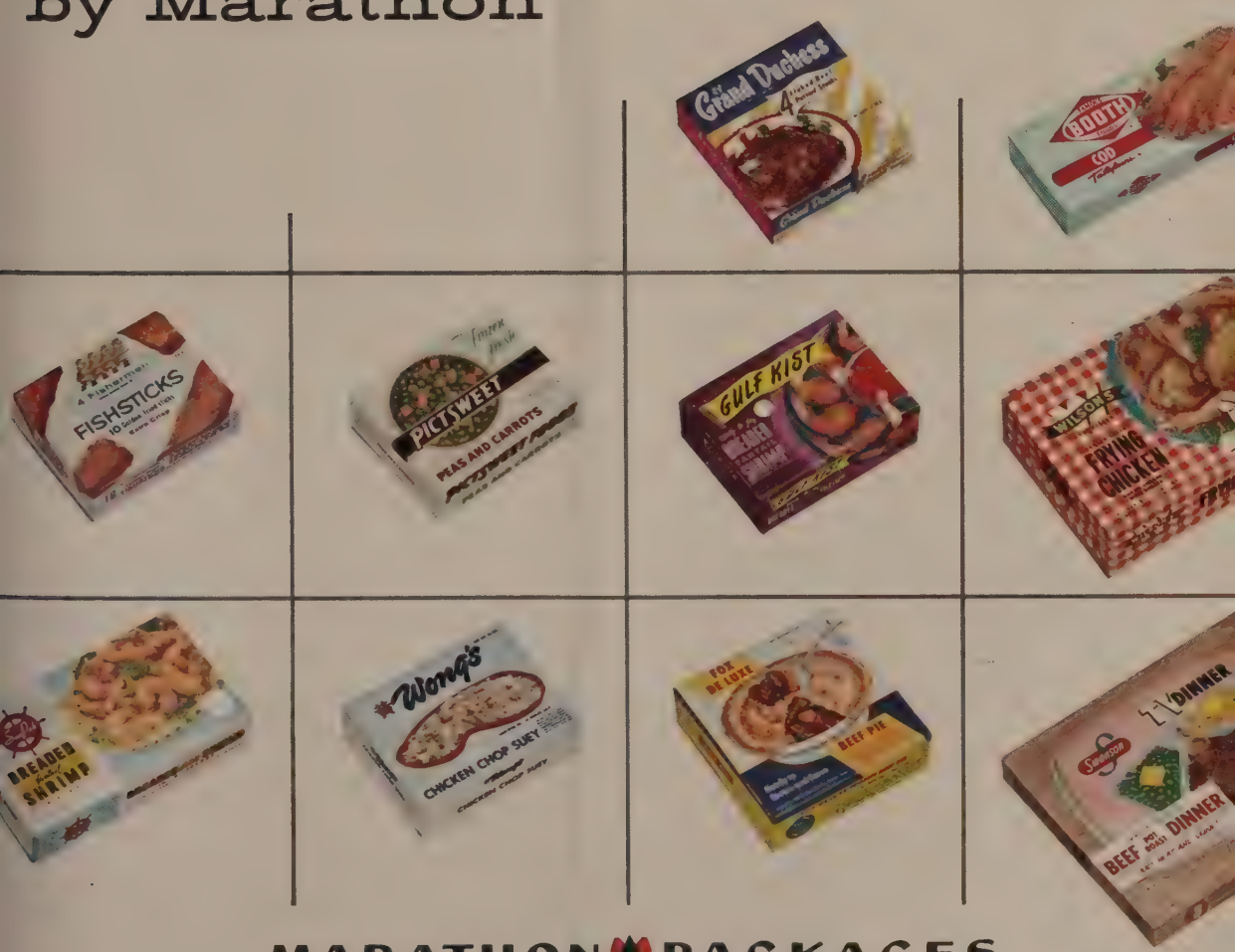
new high-gloss GLAMAKOTE by Marathon



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What Antibiotics Promise—

Higher Fish Quality Over Longer Periods

Condensed from a paper

By ALEX S. MALASPINA

● Foods spoil through a number of independent mechanisms such as oxidation, desiccation, enzymatic action, and, most important of all, microbial growth.

Methods devised to prevent spoilage usually change the flavor, consistency, and general character of the food. Freezing has been successful for preserving food in a nearly unchanged state. Refrigeration, the most common method of preservation, will keep a food product fresh but for a very limited period of time. However, prior to the discovery of antibiotics, no non-toxic chemical compound was available which, in very minute quantities, would extend the storage life of a food in the fresh state by effectively inhibiting bacterial growth.

The term *antibiotic* currently used designates a metabolic product of a microorganism that is detrimental or inimical to the life activities of other microorganisms.

Antibiotics such as oxytetracycline and chlortetracycline, which are active against a large number of bacteria, both anaerobic and aerobic, are said to have a broad antibacterial spectrum.

When added to foods at practical low levels, these antibiotics are not bactericidal but *bacteriostatic*. They effectively inhibit growth and development. Thus, they do not sterilize the food but depress the rate of bacterial spoilage, thereby prolonging the normal storage life of the product. For best results, they should be used in conjunction with refrigeration. Antibiotics are effective only when the food processor practices good sanitation and cleanliness. They can not be used to disguise spoilage that has already occurred or to reclaim heavily contaminated food. It has been established that the low levels of antibiotics used in foods in no way affect the color, texture, flavor or odor of the product.

● Many very promising studies have been conducted on the use of antibiotics in fish.

While antibiotics may reduce spore counts of *Clostridium botulinum*, it is still an open question whether they can be relied upon to produce, with reduced retort heat-treatment, complete sterilization in canned foods.

In fish antibiotics will play an important role. Of the three types of spoilage that occur in fish, bacterial, oxidative and enzymatic, the first one is by far the most important. The use of antibiotics will greatly assist in extending the freshness of fish and in eliminating important economic losses to the fishermen and fish industry. Not only will the fisherman be able to stay at sea longer and thus obtain a larger quantity of fish, but also the quality of the fish, when sold, will be considerably improved. The use of antibiotics will almost double the normal storage life of fish and will permit a longer interval between catch and consumption.

● The antibiotic treatment should start immediately after the fish have been caught.

The method of storing fish on boats or on shore in refrigerated salt water has been applied to some extent. A quantity of about 5 ppm of a broad spectrum antibiotic added to the salt water, will be inhibitory to the bacteria and the fish may remain fresh for extensive periods of time.

A second procedure for adding an antibiotic is to dip the fish very briefly in a 50 to 100 ppm solution of antibiotic just before icing to inhibit the surface bacteria.

The third and most practical method of employing an antibiotic is to incorporate it in the ice used for packing the fish. The quantity of the broad spectrum antibiotic in the ice should be about 5 ppm.

Finally, it seems probable that by combining the method of dipping the fish briefly in an antibiotic solution with that of storage under antibiotic-ice maximum bacterial inhibition may be accomplished.

Antibiotics are more effective against bacterial spoilage in eviscerated fish than in non-eviscerated whole fish since they cannot penetrated the flesh of round fish sufficiently to be able to combat the bacteria inside the viscera.

● Fillets are usually dipped in a bri solution before the freezing operatio It may be very beneficial to add antibiotic to the brine at about 5 pp No change in processing would required. It may be of considerab advantage to add an antibiotic to t water used for thawing the fish inhibit the rapid bacterial growth du ing and after thawing.

The addition of 1 to 2 ppm of antibiotic to shell fish in the raw cooked state may materially increa its quality, and may insure agai pathogenic bacteria.

When a new process or chemic agent is found to have applicati in food processing, investigations to its complete safety of use are ma datory. In general, the broad spe trum antibiotics are destroyed cooking. It is believed that even a few ppm or a fraction of a pp of an antibiotic remain in the foo no harmful effects will result.

Sensitization to the broad spectru antibiotics is extremely rare as co pared to other antibiotics.

When there is substantial eviden that in the antibiotic-treated fo there is no residue remaining pri to consumption because of inactiv tion due to storage and/or cooki then clearance can be obtained fr the Federal authorities for the use the antibiotic in that particular foo

It is believed that antibiotics w find extensive applications in the fi industry and will probably be us in combination with other metho of preservation. Antibiotics shou play an increasingly important r in preventing spoilage losses and th will give the peoples of the wo safer foods in greater variety and lower costs.

Dr. Malaspina is a member of the Techn Service Department of Chas. Pfizer & who delivered the paper from which article is condensed before a recent mee of the New England Fisheries Technolog in Boston.

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In Congress

Brand-New Bait

● Imaginative boldness of the Magnuson Measure marked March developments in congressional fisheries affairs.

This bill presented brand-new bait. With its independent, paid fisheries commission; and its imports-controlling, money-lending companion bill, the measure carries a lot of weight and commands a lot of attention because its author is the chairman of the Senate Committee on Interstate and Foreign Commerce, which handles fishery matters in the upper house.

Because of this fact, the Magnuson Measure can be expected to clamp an effective quietus on competing legislation, so far as any possibility of passage at this Election Year short session is concerned.

● One thing the Magnuson bill proposes in common with other fisheries relief proposals:

Declares a national policy toward fisheries, saying, "A sound and comprehensive national policy with respect to the development, conservation for preservation, management and maximum use such resources, the prevention of excessive exploitation thereof, and the promotion and maintenance of prosperous and productive conditions in both the commercial and the sport and recreational fisheries industries is essential in the public interest."

Distinctive element in this statement—its inclusion of sport and recreational fisheries in the broad policy—extends through the bill and is one of its truly notable innovations.

● In short, the Magnuson bill would:

Set-up a paid ($18,000 annual salary) commission of five member, not more than three from any one political party, to operate all federal functions with respect to fisheries. This commission, whose members are subject to Senate confirmation, would have the power to make "such rules and regulations as it deems necessary to carry out the provisions of the act."

The measure specifically forbids any citizen of the United States from fishing salmon, trout *or other fishes* on the high seas with "any form of net, gear or other appliance which the commission finds would prevent or interfere with the conservation of such fishes."

(In other words, the commission would control high seas fishing by American citizens, including salmon trolling or tuna fishing.)

● Another interesting gimmick in the bill is the fact that lawyers believe its failure to refer to or repeal the White Act would block transference of control over Alaska fisheries to the new commission.

● *COMPANION* to the main Magnuson Measure is one providing for a Fisheries Stabilization Corporation with members of the U. S. Fisheries Commission as its board of directors.

This second bill is essentially an economic proposition.

It provides that restrictions be imposed upon imports of fish and fish products whenever the Fisheries Commission finds that a peril point has been reached and there is serious injury or unreasonable hardship to the domestic fishing industry.

Further, it establishes a fund of $5,000,000 from which loans can be made to fishermen, boat builders, processors and marketers for the purpose of increasing the production and *consumption* of fish and shellfish. Moreover, the corporation could issue bonds to obtain further funds if necessary.

● What chance has the double-barreled Magnuson measure?

With so sweeping a proposal, there is little risk in forecasting that it can not be expected to reach enactment at this short session despite the powerful character of its sponsorship—in which Senator Kuchel of California joined.

Moreover, Congress for many years has been extremely loath to create more independent commissions of sort. The one recent exception is Atomic Energy Commission.

That it is prepared to take fishe out of the departmental organiza table and turn it over to a new c mission is to be doubted.

When you consider that this agency's authority would transc that of the established Tariff C mission; and that it would have po to issue bonds and make loans, d of favorable congressional action t to grow.

● *SUSPENSION* of hearings on Bartlett Bill to transfer control Alaska fisheries and wildlife to territorial government had that m ure on the shelf at presstime—a a rather stormy earlier hearing w out-of-Washington witnesses ha chance to talk.

Appearing for the bill were C ence Anderson, Alaska fisheries rector; Ken Hinchey and Miles B don, Anchorage; and Harold Har Cordova.

Opposition included W. C. Arn managing director of the Alaska mon Industry, Inc.; Jack Woods Vito di Mercurio, Alaska Fisherm Union; Walter Hanson, Alaska ring Industry; and Donald L. Mcl nan, Alaska fisheries administra U. S. Fish and Wildlife Service.

A telling point of opposition that the bill would permit the t tory, by fixing a residence req ment on licenses, to exclude non- dent American citizens from fis in Alaska waters.

Another was the contention the territorial government was equipped to administer the resou

● *BULLSEYES*—One of the cha made against the Bartlett bill was surrender of Alaska fisheries adm tration to the territory might seri ly weaken the position of the U States under the International N Pacific Fisheries Treaty.

Moreover, it was contended the fened program of the present Fish Wildlife Service administration not been in effect long enough to evidence of its effectiveness; and it might be a tragic mistake to i rupt an operating program befo had been able to demonstrate its ity to reverse the downward t which had its inception under the mer regime.

Department of the Interior prop that wildlife administration be tu over to the territory as a test of it ministrative capacity before it v be called upon to shoulder the l responsibilities of the fisheries.

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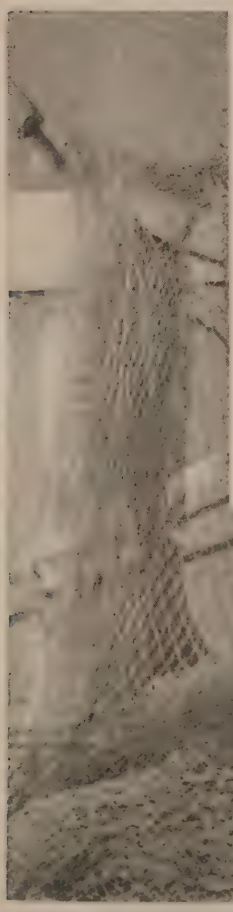

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PACIFIC Fisherman's NEWS

APRIL
1956

Ottawa Blocks Sockeye ishing Rules for '56 s a Treaty Violation

Plans of the International Pacific non Fisheries Commission to en- e drastic restrictions for Sockeye year as a necessary conservation asure will have to be revised as a lt of the opposition of the Cana- n department of fisheries, on the unds that they are a violation of treaty.

Canadian Fisheries Minister James clair has asked the chairman, R. J. oettler, to have the commission onsider the proposal, which was ginally outlined to the industry at neeting of the advisory board in ncouver by Loyd Royal, director of commission.

Mr. Royal declared at that time that area of fishing was so widespread the fishing effort so intensive and ective that the commission staff had ually lost control of the fishery in 5. With a relatively light run in spect for 1956 it was recommended t there be no offshore fishing for ckeye during the coming season; t, in effect, there would be no sein- for Fraser River Sockeye by Cana- n fishermen anywhere during that iod.

nasmuch as the Commission felt t the drastic measures proposed e essential to the proper control the important Sockeye fishery, and view of the virtually unanimous acquiescence of industry representatives, then and at a subsequent meeting in Seattle, the objections raised by the Canadian department as expressed by Mr. Sinclair caused some disappointment. In his letter to Mr. Schoettler, Mr. Sinclair expressed the hope that the same conservation results as might be achieved without this "precedent of completely closing an important Canadian area, an area which is of very great importance to us in other fisheries as well as in the Sockeye salmon fishery at the moment."

Mr. Sinclair explained his attitude in a speech in the House of Commons at Ottawa March 2. He recalled that it was only in recent years that Canadian fishermen had actually begun to fish the outside waters.

"Before, the Sockeye would swing around the end of Vancouver Island into the Strait of Juan de Fuca, where the U. S. fishermen would get their half of the fish," Mr. Sinclair told his fellow Canadian legislators. "The Sockeye would then go into the Gulf of Georgia and up the Fraser River, where our fishermen would get their half of the fish. In recent years, we have encouraged the fishermen (Canadian) to get out to sea and establish historic rights on the high sea fishery; and also to put us in a little better position."

Mr. Sinclair paid tribute to the success of the Commission in maintaining an equal division of the catch between Canada and the U. S., but nevertheless, he said "we were always in a position of getting the second half of the catch," and he added:

"I thought it would be much better if we had the first crack, then the U. S. got their share and we topped off by fishing in the second Canadian water. So far as the other four species of salmon are concerned, which are not covered by this commission, the outside fishing is most important. Unless we fish out there the U. S. fishermen get the first crack at these fish as they pass Puget Sound on their way to the Fraser River. It was for that reason that two years ago I encouraged the fishing industry to bring in 15 big deep sea seiners so we could build up our share of this fishery in outside waters. It is for this reason that the suggested closing of these waters is of particular importance to the Canadian fishing industry."

Mr. Sinclair told the House of Commons that his legal advisors had informed him that the commission's proposal is in direct contravention of the commission treaty which was approved by Canada in 1937. Article 4 of the treaty says that if any of the Canadian waters are to be closed, all the Canadian waters are to be closed; if any of the U. S. waters are to be closed, all the U. S. waters are to be closed.

"It is quite true," continued the Canadian minister, "that over the years there may have been minor variations in that we did agree upon closing inside areas for week-end closure of different lengths, but never have we agreed, in violation of the treaty, to a complete closure of a very important Canadian fishing area."

re Damages Troller

The troller, *Springer*, owned by tt Stuckey at Ketchikan, was gutted fire in January at Thomas Basin. cording to reports, the fire was sed by a short in the wiring ignit- fumes in the bilge. Mr. and Mrs. ckey were living aboard at the e of the fire. Future plans for the *inger* are indefinite.

George Ehler, Veteran Halibuter, Is Killed

Capt. George Ehler, owner of the Seattle halibut vessel *Chelsea*, and long a leading figure in that fishery, died in March from injuries suffered in an automobile accident at Sedro Woolley, Wash. Mrs. Ehler also was killed.

Tractor Kills Fisherman

Francis William "Bill" Nye, 64, formerly widely known Eureka fisherman, was killed in a tractor accident at his ranch near Fort Bragg, last month.

Mr. Nye had retired from the sea some years ago. He leaves his wife, a daughter, and three sisters.

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Pacific Fisherman's NEWS

April 1956 Volume 54 Number 5

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Joe Jurich Says:

"Control of Units of Gear Prime Conservation Problem"

● *How to control the number of units of fishing gear, and thus the intensity of fishing, without doing violence to democratic processes and American concepts of law and equity.*

Task of seeking the solution to this riddle was shouldered this spring by the interim fisheries committee of the Washington legislature, acting on the suggestion and at the insistence of J. F. Jurich, Secretary, Local 3, Fisheries Division, I.L.W.U.

The proposal was warmly supported by Joe Burrows, president of the Puget Sound Gillnetters Association.

Determination to study ways and means by which gear limitation might be accomplished, and to start the research with a request for opinions and analysis by the Washington attorney-general, marked the Seattle hearing of the legislative interim committee at the end of February.

● "Control of the number of units of active fishing gear is the heart of the present problem of fisheries conservation and rebuilding", Mr. Jurich told the legislative committee. He pointed out that regulations which seek to limit intensity of fishing by seasonal restriction may fail to provide the escapement sought, and are entirely ineffective as a means of biological rehabilitation; while limitation upon the size and type of gear units without control of their number encourages economic disaster.

Mr. Burrows contended that thorough study of the problem would produce constitutional means of control, perhaps along the line of the franchise method.

Possible development of a legal means by which intensity of fishing could be controlled through limitation on units of gear active was considered of wide potential importance, reaching far beyond the limits of the fishery of a single state. With the Washington interim fisheries committee addressing itself to the task, there appeared an encouraging possibility that a formula might be found; and the certainty that under the drive of Representative Chet King, chairman, the possibilities of solution would be thoroughly explored.

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76

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SAN PEDRO SEINE SETS

ANTONNIO La FATA, San Pedro fisherman, died at the age of 52. Requiem mass was held at Mary Star of the Sea Church. . . Gilbert Van Camp recently presented service awards to 296 employees of the Van Camp Sea Food Company. Top awards of pins for 35 years of service went to W. H. Gillis Sr., Josephine Morales and Pete Viramontes. . . . Fishermen's Cooperative Association Auxiliary recently held an Aquamarine Tea, with Mrs. Lawrence Zuanich (he skippers the *Stranger*) as chairman. New members of the group are Mmes. Nick Gargas, Nick Trutanich. Pete Andrich and William Suytar. . . Gloria Ann Lopez, employed by California Marine Curing and Packing Co., Terminal Island, has announced her engagement to Augustine Gomez of San Pedro. . . Jose Zaninovich, San Pedro, has become the president of the San Pedro Yugoslav-American Club. . . *Mello Boy*, Newport Beach, is using synthetic webbing in the selvage of its fish net, reports Wm. Hutchison & Associates, distributor for Japanese manufactured synthetic webbing.

STRANGER recently figured in a dramatic air-sea rescue operation which saved two of three navy airmen who had bailed out of their plane near Catalina Island. . . Louis Mascola's son, Louis Jr., Pan Pacific Fisheries, has become the father of his first child—a son, the third boy to bear the name. . . Nick Jurlin of the San Pedro fishing family has become engaged to Marie Brancia. . . Vince Marich, superintendent of mechanical maintenance at Star-Kist, Terminal Island, has completed 20 years with the company and recently celebrated his 25th wedding anniversary. Vince is a former international soccer player. . . *Santa Lucia*, Pietro Cugliese, San Pedro, had a few bad moments when the crew discovered a mine in the fishing net. The Navy retrieved the device which was of a practice variety. . . Eva Apple of the well-known Tony Apple family of San Pedro has become the bride of John Martinis, whose parents live in Everett, Wash.

NEW SEA ROVER was recently brought to port from Socorro Island by the Star and Crescent tug, San Diego, the *San Diegan*. . . The Fis ermen's Cooperative Auxiliary cently voted funds for the March Dimes and the American Red Cro . . . *Ronnie M* and the *Pioneer* ma fast trips from the tuna grounds Baja California—taking a little mo than 15 days to complete the job.

Bait Herring Fleet Active at Ketchikan

Three seiners were busy the fi part of January catching herring the cold storage plants in the Ketch kan area with most of the fishi done in the vicinity of Ward Co The boats were *Pirate*, skippered Fred Brandeis; *Lady Alice* of t Tongass Bait Co., with Harold Jo genson and Elmer Larson at the hel and Conrad Olson's *Libby No.* 4.

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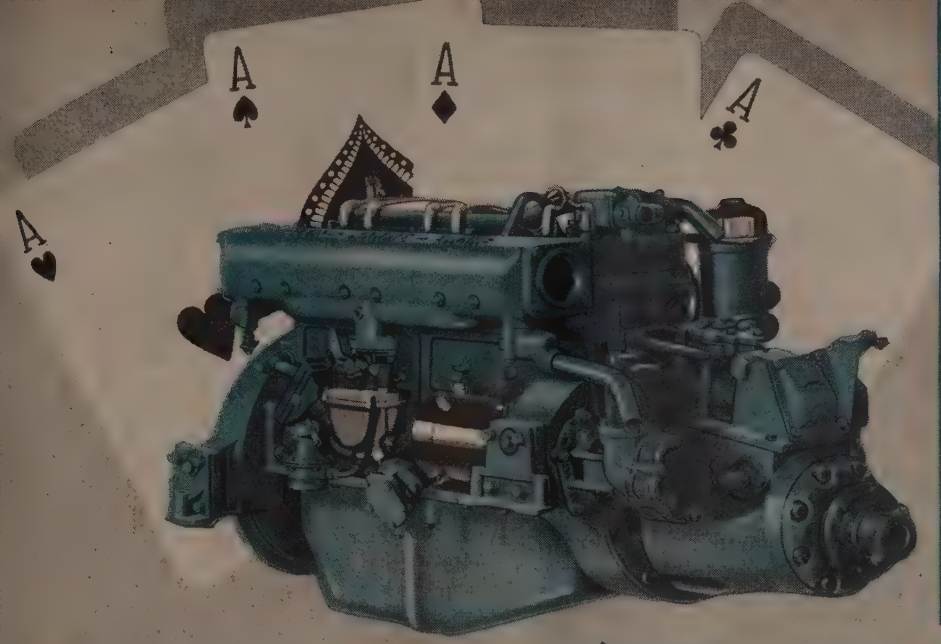
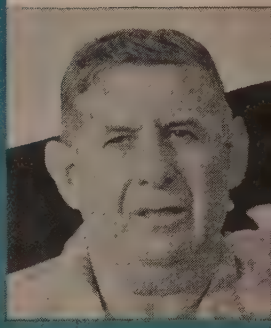
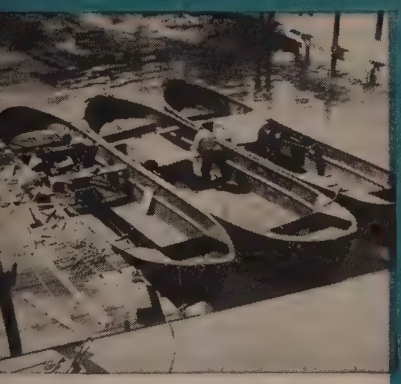


Capt. John Santos, owner and operator of menhaden and shrimp trawler fleets and well-known ship builder of Patterson, Louisiana.

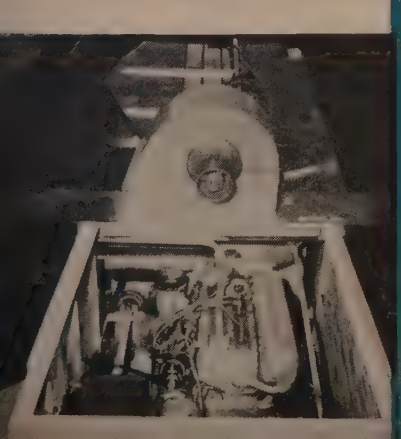


"Chrysler Aces rate 'ACE HIGH' with me"

. . . reports Capt. John Santos whose entire 25 boat menhaden purse fleet is Chrysler Powered.



In the background are three additions to Captain Santos' menhaden purse fleet being fitted out with Chrysler Ace Engines. Installations, below, are neat, take minimum room, leave maximum space for payloads.



Here's what Captain Santos writes concerning his experience with Chrysler Ace Engines in his purse fleet:

"Five years ago I installed Chrysler 'ACES' in a pair of purse boats —the boats that set and gather the nets in menhaden fishing. Today our entire fleet of purse boats is powered by Chrysler 'ACES.'

"We've got to have good engines in our purse boats because an engine failure could mean an appreciable loss. We've found Chrysler Engines completely dependable and economical to operate. Parts are easy to get, too, and service is good.

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"WE RAN TWO YEARS WITHOUT PULLING AN INJECTOR, too, after changing to Standard Diesel Fuel," says Jim Martin (above, left). "We've had no trouble at all with fuel pumps and injectors, even though we didn't use fuel filters. Standard Diesel Fuel always gives full power at all engine speeds."

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C. Special compounds stop corrosion of any bearing metal and foaming in crankcase.

STANDARD OIL COMPANY OF CALIFORNIA

What Will Come of IMP (Initial Minimum Price)?

● What can be expected from the Canadian movement to force a minimum initial price contract into Pacific halibut marketing?

Pacific Fisherman asked the question widely this spring, and received a wide variety of answers. Analyzed, however, they fall into several broad divisions.

Sponsors of the movement of course declare they are receiving "overwhelming support." In Canada there has been a build-up of support all right; but whether it is "overwhelming" is subject to some question.

Union members on Puget Sound are giving evidence of substantial interest in the project—and you hear quite a little "strike talk," although without too much enthusiasm.

Vessel owners on the American side seem unconvinced. Most of them remember that "minimum price" projects in the past invariably resulted in long-run losses to the producers, as well as the dealers.

Sampling of Alaska opinion indicates scant interest in the proposal.

● At the same time, there are thoughtful people in the business who feel it would be a serious mistake to scoff at the possibility that a strike may eventuate.

They say that the timing of the movement is well chosen. The producers were bitterly disappointed with the prices secured last season, and are susceptible to the glittering promise of minimum initial prices at high levels, with bidding going up from there. Sounds good, of course, and many think it deserves a try.

● Skeptics suggest that the ideology of the minimum price leadership makes the attainment of the minimum a lot more important than the price.

In other words, they feel that the sponsors may put more importance on establishing of a socio-economic point than in the attainment of better prices.

Support for this thinking is found in an official statement from the Fishing Vessel Owners Association of B.C. which, after setting forth the minimum prices at which bidding would be permitted to start, says "the conference was prepared to bargain on these prices"; and "opportunity for the memberships of all organizations in the various ports to vote on any other offers from the dealers."

The prices, as revised at the second Vancouver meeting are: Seattle, 25c; Vancouver, 24c; Prince Rupert, 23c; Ketchikan, 22c; all other Alaska ports, 21c.

● American dealers almost without exception feel that the law makes it impossible for them to accept the contracts submitted.

The leaders of the minimum price movement seem to have overlooked this point, possibly because of unfamiliarity with conditions in the United States and requirements under the American law.

Discussion with a good many dealers failed to show any who felt that they could legally either sign the contract offered—or any like it; and some lawyers are of the opinion that even meetings with the "central policy committee" would come within the legal definition of a "conspiracy."

● By and large, the attitude of the

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. . . says Joe Barcott of Everett, Wash.

Here's another vote of confidence for Nordberg Gasoline Marine Engines in hard-working fishing service.

The 31-ft. gillnetter *MELINDA*, owned and operated by Joe Barcott of Everett, Wash., is ably powered by a husky 155 hp Nordberg *KNIGHT* with a 2 to 1 reduction gear.

Designed by Edwin Monk and built by Northwest Boat Shop in Everett, *MELINDA* is used for salmon fishing in Puget Sound on an average of 60 hours per week. Here's what her owner-skipper has to say about the performance of his Nordberg *KNIGHT*:

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ealers on both sides of the line seems be that there is nothing much they an do or say in the matter, at least ot until the proposition and its spon-orship has become much more defi-ite than it was at presstime.

They all expect to be able to pay ore for halibut than they did last ear, but not on a guaranteed mini-um initial bid basis; because they re sure that would violate both the conomic law and the federal criminal aw.

"Paul L" Charged With Violating Petrale Rule

Trial of charges brought against he dragger *Paul L.* and Rudy Schulze, s master, on charges of violating he Washington state fisheries regu-ation against landing in excess of ,000 lbs. of petrale sole during the eriod from Feb. 1 to April 15, will e heard in the court in Port Angeles arly in April.

The vessel was boarded by state isheries officers at Neah Bay during his period when she entered state vaters. Taken to Bellingham, the ves-el's hold yielded 33,000 lbs. of pe-rale.

The 6,000-lb. limit was imposed with the approval of most of the Washington trawl fleet as a conservation measure to protect the late winter spawning accumulation of petrale sole in the Esteban Deep and other specially deep spots which this species frequents at spawning time.

"Betty Jane" Deserves Her Brand-New Diesel

Betty Jane, 65' halibut vessel turned dragger in season, has earned many a share down the years, and this spring Skipper Sig Sivertson figured she had a new engine coming.

After careful selection he decided on an Allis-Chalmers (Buda) diesel, 190-hp., turning her wheel through a 4:1 Capitol hydraulic gear.

Trend Toward Jitneys Marked This Spring

Five "jitney" fishing craft, variously seiners or gillnetters — and handy for monkeyboats, or what-have-you — will be delivered this spring by Sagstad Shipyards, Seattle.

Two of the little boats, 26-footers, are for Harvey Sharp. They are fir-planked and powered with Chrysler Crown engines, working through 2:1 gears.

Similar in length, but built of plywood, are three jitneys for the Port Chatham Packing Co., the Nilson family salmon cannery and smoked salmon operation at the entrance to Cook Inlet. Straight-drive 95-hp. Nordberg "Bluefin" engines were chosen.

California Tuna Operations — February, 1956

(Approximate figures for tonnage and total case pack)

San Pedro	
Species	Tons
Yellowfin	4,675
Skipjack	3,583
Albacore	1,510
Total	**9,768**
Pack in cases	454,117

San Diego		
Species	Tons	Combined Tons
Yellowfin	2,202	6,887
Skipjack	2,463	6,316
Albacore	7	1,517
Pack in cases	196,247	650,364

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Tanks	Ladders
Lockers	Furniture
Floorboards	Galleys
Doors	Lining Panels
Refrigerators	Floats
Hatch Covers	Docks

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Easy to Clean	Easy to Repair
Easy to Work	Buoyant
Solid Throughout	Non-Magnetic
Large Size	

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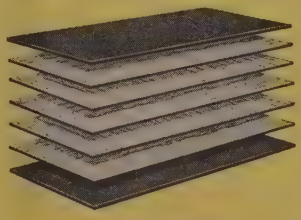

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This is the Net, and--

These are the Men

Dominic Misetich Anton Misetich

Anthony M

Pioneers All-Nylon Tuna Seine

● Score another "first" for the *A*
thony M., San Pedro's largest tu
seiner, and for the Misetich fami
owners, who long have pioneered ne
gear and new methods to increase fis
ing efficiency.

This time it's an all-nylon tu
seine, *all*-nylon — web and selva
twines and lines.

The netting was manufactured
A. M. Starr Net Company, usi
100% DuPont nylon twine produc
by Brownell & Co., Moodus, Con
under its "Brownie" trade mark. T
web alone required approximately 1
000 lbs. of DuPont filament nylon.

The *Anthony M.* seine is the fi
all-nylon tuna seine, and is believ
to be the largest — possibly also
first — all nylon net of this kind
American fisheries.

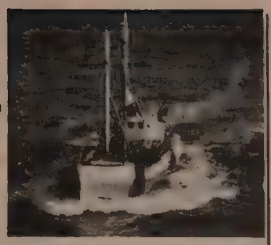
How big? Length, 410 fathom
depth, 34 fathoms.

What does such a net cost? Arou
$38,000.

How can a fisherman afford su
a net? Anton Misetich, who cus
marily skippers *Anthony M.*, crec
his crew of efficient, highly-skil
fishermen whose willingness and a
ity to catch fish and make product
trips year after year has made it p
sible to finance an investment of su
proportions.

The net proved successful in its f
use on the first 1956 trip of the *A*
thony M. to the high seas off So
America, a trip that took 39 days, e
ing with docking of the boat at S

HIGH SEAS-
DRY YOU!



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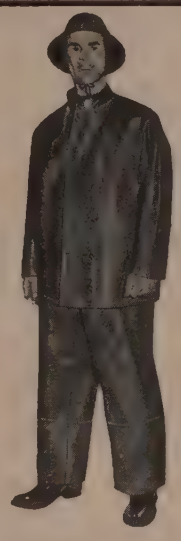
Neoprene coated outside, inside sheds acids, oils • smooth corduroy-tip collar • full-length jacket bib-front overalls, adjustable • cut-off band, shortens without raveling • in black, yellow, olive drab



U. S. Ruff-N-Tuff Eureka Suit
• strong, heavy-coated fabric • vulcanized waterproof seams • inside fly front • corduroy-tip collar • bib-front overalls • elastic suspenders • cut-off band, shortens without raveling • in black, yellow

Storm King Boots • tempered rubber • reinforced toe • deep-treated outsole

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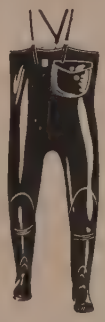

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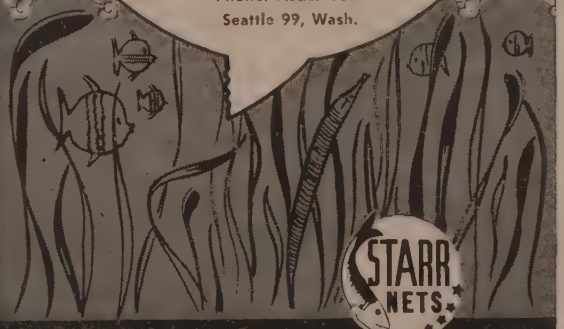


SYMBOL of QUALITY in Commercial Fish Netting for Over 60 Years

A. M. STARR NET CO.
EAST HAMPTON, CONNECTICUT

Kist, Terminal Island, February 28. Only six sets were necessary to give the 120′ vessel enough tuna, largely Skipjack, to return her to port. Bad weather slowed the voyage home.

Figuring heavily in the efficiency of the new net, with its advantages of light-weight and great strength, is the swift and easy handling by the Puretic power block. On the trial of the net and power block in the San Pedro harbor, only 45 minutes were required for the set and until the net was again stacked on the turntable. It was a water haul, merely to test the gear.

Skipper Misetich says he believes the nylon tuna net working with the power block is the "salvation of the tuna purse seine industry"; and he highlights the fact that the lightness of the net and its quick handling by the power block make even a skunk set pardonable, since the time of hauling-in the net is cut in more-than-half, giving the crew time to find a more productive fishing ground.

● *DETAILS* of the net, which is hung with about 4,000 Spongex floats, a product of the Sponge Rubber Products division, B. F. Goodrich Co.

First of all, the webbing was dipped with tar supplied by the Riley Tar & Chemical Corp., Los Angeles. This was done to give the net which is some 2400 pounds lighter than cotton, dry, "sinking-weight," according to Captain Misetich.

Now for the construction of the net itself. In the 5½-strip net, from the cork line down, the first four strips are 42-thread nylon twine, 4¼" mesh, 100 meshes deep per strip.

Then was built into the net one strip, 54-thread, 5" mesh, 100 meshes deep. Next, a half-strip, 50 mesh deep, 72-thread.

Cork line selvage consists of five 5" meshes of nylon parachute cord. Similar material, but with five 7" meshes, makes up the selvage at the "lead" line.

The "lead" line actually is of chain, following the now almost universal practice among San Pedro tuna seiners. McKay chain is used, ⅜" in the center section and 5/16" in the wings.

In addition the 8" purse rings are bridled to the "lead" line with ¼" McKay chain. Each ring carries a link and this is attached to the chain bridle by means of a clevis.

Much smaller rings, 4", are spaced 2½ fathoms on the corkline, with a manila line running through them to control the corkline and prevent spills when a big "jag" of fish is taken.

Specifications on some of the cordage items going into the net are:

Corkline—Nylon, in three weights: 41 lbs. of 1½" circumference; 182 lbs. of 2" circumference; 121 lbs. of 2¾" circumference, all of Ame Manufacturing Co. make. The he line used on the ends.

Twine — All nylon of Brow manufacture; 97¾ lbs. of 42 ment; 104 lbs. of 54-filament.

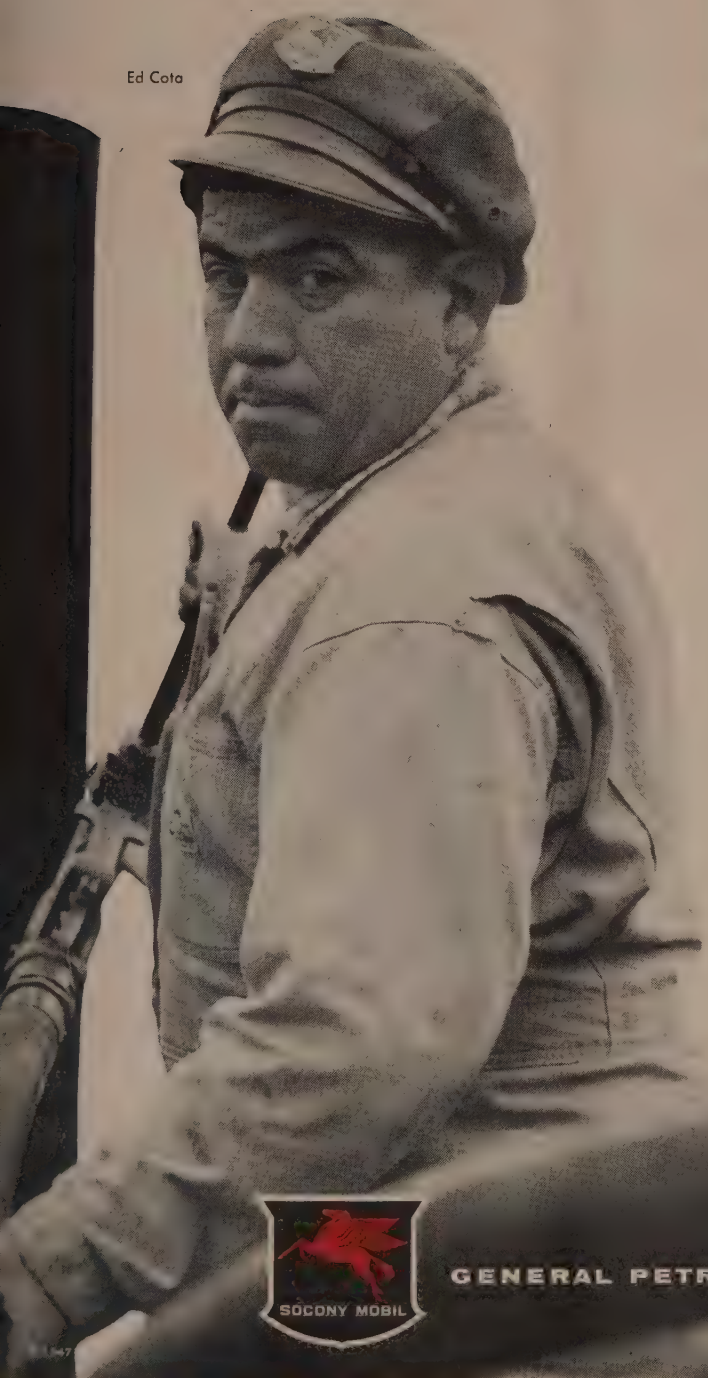
● *KNOTS* used on the new nylo according to Captain Misetich, ar glish slip knots; and the harde strain, the tighter the knot.

The *Anthony M's* net has no ends—many purse seine nets d tapered ends, and no "bunt," as In order to cut the net (and in o the boat's first trip this year, 40 were taken in one "cut") a ve strip of 5" web netted from n parachute cord runs from cork to line every 100 fathoms. This pro a "zipper" with which the tuna can be divided for brailing.

Flotation comes from 4,000 Sp

Nylon Net Details—Puretic power block the seine in the upper left view. This 1956 version of the block, with Vicke draulic drive. Corkline arrangement and feature the upper right; while in the left is seen the chain "lead" line an bridles, with Nicholas Jubuka, the v navigator, working on the gear. Lowe view shows the rings coming up with chain bridles and the head of the n

19 *years*



Ed Cota

Nineteen years ago, young Ed Cota went to work for General Petroleum at the Marine Dock in San Francisco. It was a good job for Ed . . . helped him work his way through the University of San Francisco, in fact, where he received his A.B. in Education.

After a stint as a teacher at an exclusive boys' school in Santa Barbara, Ed decided to return to his first love – the San Francisco Marine Dock – where in 1941, he became the G.P. marine agent.

Married, and the father of six children, Ed Cota enjoys his job because "I like the people I deal with"– the tugboat operators, fishermen and private boat owners who've made Ed's spot a habit whenever they're in port.

From Ketchikan to San Diego – just about everywhere on the Pacific Coast – you'll find a friendly, reliable G.P. marine man ready to serve you with the top service and products for your boat. Look for him under the sign of the Flying Red Horse.

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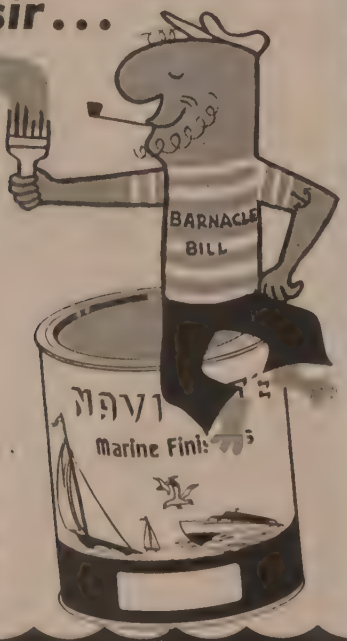
Yessir...



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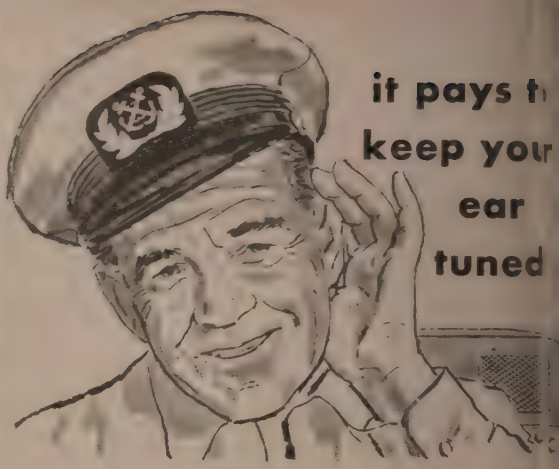

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ats, 6 by 3¾", spaced 11 to the hom. Rope used in the net is American Manufacturing Co. nylon.

Wire purse line used by *Anthony M.* the standard for tuna seining, 9/16", 19 construction; with a ⅝" center tion.

In most respects the hanging of the lon net follows traditional practice San Pedro tuna gear. Captain setich has found that the wet net ighs almost exactly the same as en it is dry, proving that the nylon sorbs almost no water.

POWER BLOCK — The patented iretic power block which handles the *nthony M.'s* net with speed, ease and oroughly relaxed operation, is conructed by casr aluminum alloy by e Marine Construction & Design Co., eattle. The sheave is 38" diameter nd is powered with a Vickers hydrauc motor. The Vickers hydraulic pump the system is below decks, driven ith a 15-hp. reversible electric motor.

The *Anthony M.'s* Block, designed work the big nylon net, has stainless teel shafts, pins, and driving chain. he V of the cone sheave provides vedging action for the net. Rubber overing and cleats are vulcanized to he sheave.

The seiner was the first boat to try he first experimental Puretic Block, and its operation on salmon vessels was reported in *Pacific Fisherman's News*, May, 1955.

To add to the perfection of the equipment, *Anthony M.'s* owners recently equipped the boat with a Raytheon Model 1500 Mariner's Pathfinder radar.

Perhaps on her next trip the *Anthony M.* will have new 28-foot planked hull skiff aboard, unique because of the Hanley Hydrojet, working from a gasoline engine. The skiff has been completed by Elite Boat Works of San Pedro and was originally carrying a Chrysler Crown, but it was found by Fellows & Stewart, the yard providing the "jet," that the power must be increased to properly work the Hydrojet nozzle which propels and steers and eliminates wheel, shaft and rudder.

It is believed that this new propulsion on a purse seine skiff will prove most effective since it eliminates much of the underwater equipment on conventionally powered skiffs, thus avoiding fouling of the net.

Pacific Fisherman will continue to follow the *Anthony M.'s* successful history, which began with her launching in Alameda in 1947. She was designed by the competent builder, August Nordlund, is powered with a 700-hp. Washington diesel, and has two Washington diesel auxiliaries.

Skeena's "Spider Web" Nets Take Double Catch of Pinks

• In reviewing how changes in gear and operation have resulted in a more intense and efficient fishing effort in British Columbia, Chief Supervisor of Fisheries A. J. Whitmore makes reference in his 1956 spawning report to the use of fine-thread (spider web) gillnets on the Skeena and states that *they were responsible for doubling production of Pinks.*

While Mr. Whitmore was referring to a recent development, it represents a new procedure rather than a new type of gear. The so-called spider web gillnet is merely a conventional type of gillnet rigged and used in an unconventional way. When this technique was first introduced on the Fraser River four or five years ago it was described as "tangle net", and it was so effective that the Department of Fisheries promptly took steps to restrict its use.

The tangle net procedure, as practiced on the Skeena during the past season, means simply the use of a lot more netting on the cork line. Normally, the gillnet fisherman has about twice as much netting in use as the length of his cork line. That is to say, if he has 200 fathoms of cork line he uses 400 fathoms of netting, hung-in 2-to-1.

When originally used on the Fraser this ratio was closer to 6 to 1, and this concentration of net provided virtually an impenetrable barrier for some salmon, notably Pinks, which are not so aggressive or energetic as the Sockeye, Coho or Spring. The tangle nets didn't necessarily gill the Pinks, which became entangled in the slack curtain of netting. Pinks lacked the drive and power to extricate themselves. Once they hit the net they were caught.

The net used for this type of fishing is invariably nylon and when operated as a tangle or spider-web the net itself as well as the lines may be considerably lighter than the average.

Information reaching the Department of Fisheries indicates that this type of fishing is twice as effective on Pinks as the ordinary methods of gillnetting. Size of twine used varies considerably—all the way from 23 or 33 gauge to 43 and 53. Generally speaking, 18 gauge is regarded as too fine for salmon in conventional gillnet. The netting is heaviest near the corkline. Color just about runs the gamut from white to green or heavy grey. Cork lines are varied from ⅜" diameter to ⅝". The lead lines start at 3/16" and range to 5/16". Floats are more or less standard ovals 3¾ x 6".

The department is reluctant to set itself up as an arbiter regarding the type of gear to be used or the method to be practiced, and for that reason it is not likely to issue any orders prohibiting the use of tangle nets, although in the case of the Fraser an order was made effective limiting the use of tangle nets to a maximum hang-in ratio of 3 to 1. A more likely restriction would be extension of the closure on fishing in areas where use of tangle nets has given sign of interfering with adequate spawning escapement.

Stiff Babine-Skeena Restrictions Are Forecast

Special restrictions on salmon fishing in the Skeena River area in British Columbia with a view to restoring the runs affected by the Babine rockslide and other conditions have been recommended to the Fisheries Department by a special committee comprising A. J. Whitmore, chief supervisor of fisheries; Dr. A. W. H. Needler, director of the Pacific Biological Station, and F. C. Withler, director of investigations.

Fishing for Sockeye would not be permitted in the Skeena area this year until July 31 if the recommendations are acted upon, and that up to that date only gillnets having mesh not less than 8" linen or 8½" nylon, stretched measure, would be permitted so as to provide for normal fishing operations for Springs, although Spring fishing would be terminated at an earlier date if such action were considered necessary for conservation purposes. The 72-hour weekly closure would apply to all salmon net fishing and it would be extended if deemed to be insufficient for providing adequate escapement.

HE PUT SAFETY FIRST

And Got Economy and Dependability, Too.

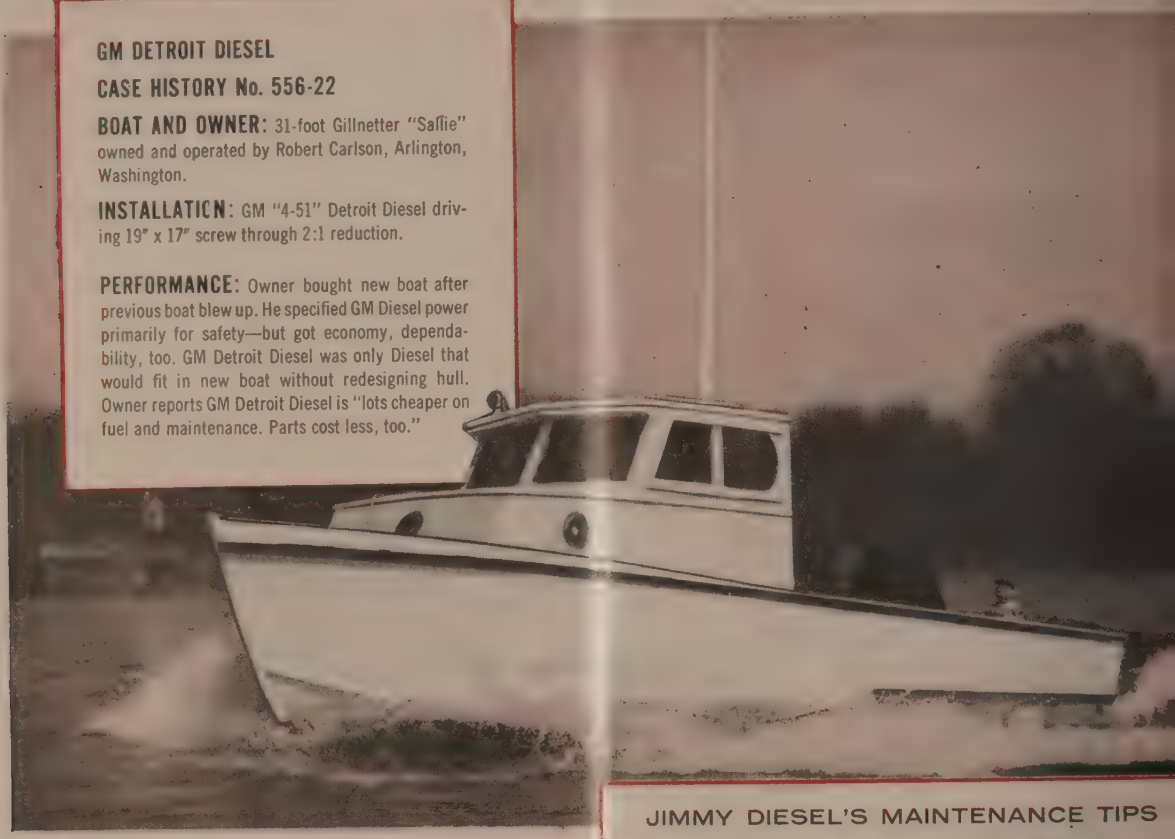
GM DETROIT DIESEL

CASE HISTORY No. 556-22

BOAT AND OWNER: 31-foot Gillnetter "Saffie" owned and operated by Robert Carlson, Arlington, Washington.

INSTALLATION: GM "4-51" Detroit Diesel driving 19" x 17" screw through 2:1 reduction.

PERFORMANCE: Owner bought new boat after previous boat blew up. He specified GM Diesel power primarily for safety—but got economy, dependability, too. GM Detroit Diesel was only Diesel that would fit in new boat without redesigning hull. Owner reports GM Detroit Diesel is "lots cheaper on fuel and maintenance. Parts cost less, too."



SAFETY is one big reason why more and more fishermen are switching from gasoline to General Motors Detroit Diesel power. For a GM Detroit Diesel burns less volatile fuel that's a lot safer to have on board.

But that's not the only reason.

For this small, compact, power-packed work horse costs far less to run and maintain than a gasoline engine of comparable power. It burns fewer gallons of cheaper fuel—fits where other Diesels won't—sells for a far lower price than you'd expect to pay for a Diesel.

If you're planning on buying a new boat—or repowering your present one—you'll be money ahead if you specify a GM Detroit Diesel. Your local distributor or dealer can tell you why. See him soon or write direct for full information.

JIMMY DIESEL'S MAINTENANCE TIPS

Got spring fever? Maybe your engines have it too. Your GM Detroit Diesel distributor or dealer can snap 'em out of it with a spring tune-up. And he'll help you set up a preventive maintenance program to keep your engines running right all summer long. Take care of your engines and they'll take care of you. And remember—Preventive Maintenance Doesn't Cost—It Pays.

Jimmy Diesel

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Engine Division
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SCOPE and SOUNDER

Monthly digest of present-day pioneering methods and equipment in world fisheries.

By PETRALE

Deep Water Black Cod Bank Rewards Fish Prospectors

Trawl fishermen seeking to locate nter "grazing areas" where paying ches can be made during the win- period of difficult fishing but high ces have been prospecting the deep ter banks off the Washington and ncouver Island coast, sometimes h good results.

Deep water fishing by West Coast wlers has been increasing steadily ce 1950, and the production from se deep areas has played a con- ually increasing part in the trawl oduction picture.

For several years a particular ob- tive of this search has been the ep water haunts of the sablefish; d a current report in the fleet indi- cates that the goal has been achieved.

An important discovery of black cod is said to have been made on certain grounds between 250 and 350 fathoms by the dragger *Al H.*, skip- pered by Jackie Ray. Fishing with the *Al H.* at the time was the *Thoreen*, which made one tow which catch was estimated to contain in ex- cess of 20,000 lbs. of large sablefish, currently worth 12c per lb., dressed.

The catches made in this stable deep indicate that the groundfish there are rather loosely schooled in the deeper water.

• English sole, a mainstay of the Washington and Canadian trawl fish- eries, are reported to have made an exceptionally strong showing off the Washington coast during January and February of this year. The very marked apparent increased abundance in the waters between Umatilla light- ship and the mouth of the Quillayute River was hailed by many trawlers as the best run of this species since 1948.

Trawlers fishing the inside waters of Puget Sound also reported the species more plentiful than usually, with particularly good catches being made in the South Sound area and in Saratoga Passage. The fish from these waters are principally useful for mink feeding on fur farms.

Many American and Canadian trawlers believe that two large popu- lations of English sole exist off the coast of Washington and British Col- umbia.

The southerly fishery, engined in largely by Washington and Oregon trawlers, extends from south of Cape Flattery to Destruction Island.

The more northerly population is fished rather spasmodically by both Americans and Canadians, primarily in the northern part of Hecate Strait on grounds variously referred to as Triple Island grounds, Two Peaks Bank or Rose Spit.

During recent years investigators of

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SHORE TO SHORE
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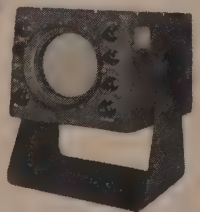

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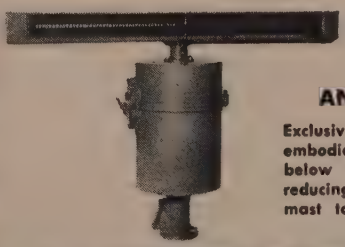

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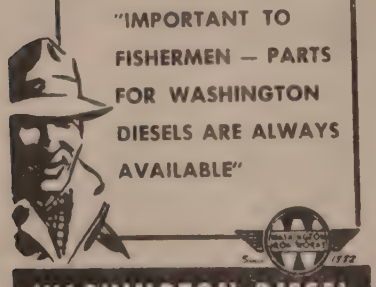

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both Canada and the United State have studied the movements of English soles by means of tagging. The Canadians' work has shown a northward movement of the fish through Hecate Strait toward the northern fishing grounds. In studies of English sole in the Strait of Georgia area a total of 13,954 fish were tagged and released from 1944 to 1954 by Canadian researchers. In general, these fish have shown little tendency to mix with stocks of other regions. Of 2,09 recoveries made from tags released in the Cape Lazio region only 23 were recaptured outside that general locality. A few recoveries were made off offshore grounds from Umatilla Reef to as far south as Eureka, Calif.

The English sole has been fished heavily since the beginning of the trawl fishery, but still continues to yield good catches.

Test Mid-Water Trawl In "Outside" Waters

• The new mid-water trawl being used in British Columbia is being hailed widely among fishermen as the answer to one-boat trawling for herring. Used by several vessels in t

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side fishery during the past year, e gear was able to compete with rse seines when it came to share rnings. Those using the gear admit rtain drawbacks, but feel they can odify the design and rigging of the awl to permit more efficient operaon.

The development of this year in itish Columbia is being followed ry closely by Alaska herring fisheren, as well as by sardine interests d American trawlers who believe might provide a valuable operation nen the California sardines return. Some fishermen are skeptical of the practicability of the mid-water trawl in pitside waters. (Thus far all actual operations have been in the protected waters on the inside of Vancouver Island.

The Fisheries Research Board of Canada has some experiments under way with the view to devising modifications for offshore use.

Puget Sound trawlers are keenly interested because of the possibility that the gear might permit them to work herring at sea; and also because it might readily bring into production grounds which are too rough for actual bottom trawling.

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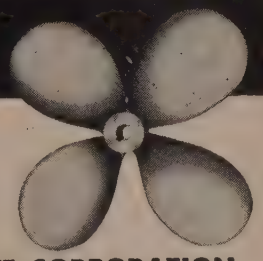

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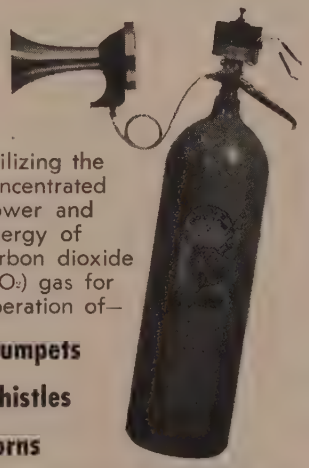

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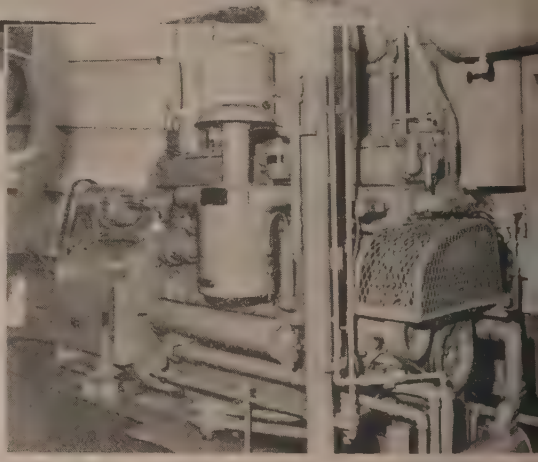

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Quality Know-How Vital For Sardine Industry's Future

— George J. Christo

One of the things the California rdine business needs most—next to h, of course—is the know-how for cking a high-quality product, better an anything in the past.

This is on the testimony of George Christo, secretary of the San Fran-sco Sardine Association, who believes e industry should undertake techno-gical research which will point the ay to products which can be sold in e United States and will please the merican housewife.

He thinks, moreover, that it's only od business to use the present op-rtunity for developing products, and eans of marketing them, before the sh come back in volume greater than e industry can pack and sell profit-ly under old styles and methods.

In Mr. Christo's own words:

"In the past we have concentrated r efforts to produce mass quantities canned sardines at low cost, with t much emphasis to taste or eye appeal. We packed to sell as cheaply as we could, in most instances below cost; to low-income countries. These foreign markets, at least the major part, I am afraid we have lost forever to foreign competition, thanks to the generosity of our government. Yet we have here in our own back yard the most lucrative market in the world, but we have done nothing to capture it. We have not kept up with the times and demands of the people. Neither have we advertised our product to any extent to capture the fancy of our people.

"The Saltonstall Act provides funds for research for fishery products, but as yet the industry has not gotten together or asked for any funds to start a research and development program for sardines to enable it to produce a better product.

"If we are ever going to benefit from the sales of our sardines in our domestic market we had better start thinking of a better looking, better tasting product that will appeal to the American consumer. It can be done provided this industry wants to do it. It is later than we think."

Market Fish Conservation Concerns Fish Marketers

At the February meeting of the Southern California Fisheries Association in Los Angeles, Bart Ghio, executive secretary, proposed the creation of a Market Fish Conservation Committee within the organization. Stimulus for this is the proposal by sportsfishing groups to ask for legislation to ban the sale of commercially-caught barracuda to fresh fish markets in California.

The group has gone on record to conduct its Fish Week at the same time as that of the National Fish Parade October 29-November .

Cornman Spelling Corrected

Apologies to David Cornman of the firm of A. R. Lantz Co., Los Angeles, for misspelling his name in the 1956 *Pacific Fisherman Yearbook* advertisement of that company, where the name was incorrectly spelled "Corman".

Correct spelling is *Cornman.*

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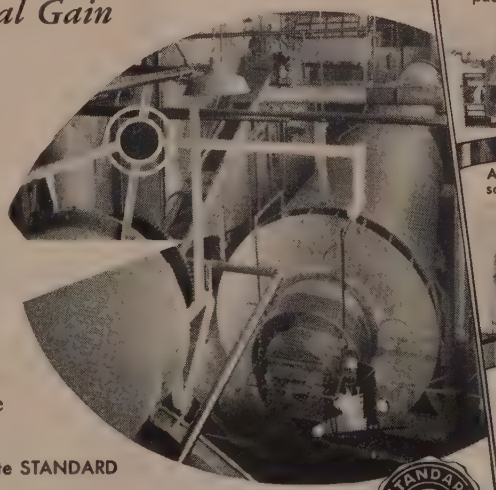

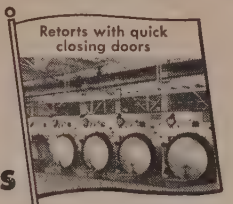

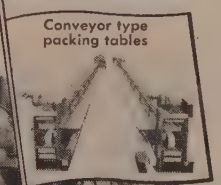

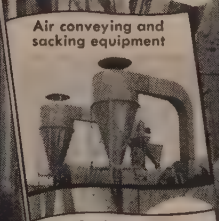

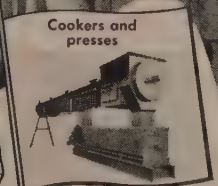

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"What We Need FIRST is A National Fishery Policy"

—D. P. Loker

• A firm national fisheries policy enunicated by Congress is the heart of a legislative proposal being laid before the industry by Donald P. Loker, vice president, Star-Kist Foods, Inc.

Mr. Loker's proposal is original and distinct in that it seeks only the one objective.

The snarl of fishery bills now before Congress have sought to establish such a policy; but they have also sought to do a lot of other things, many of them controversial, and most of them with political implications.

In explaining his proposal to the industry, Mr. Loker says:

"The wisest course for our industry would be to get a bill passed in Congress which would spell out a strong national policy for the commercial fishing industry. This would give us a base from which to operate and would give legislators friendly to our industry a floor upon which they could stand for the purpose of introducing additional and more specific bills which would strengthen the weak points of our industry. . . . I am personally convinced that our legislative progress depends on first establishing such a strong national policy."

• In particularizing this simple concept of how to make progress, Mr. Loker offers a specific proposal which he rightly says is "noncontroversial either in our industry or politically," and which follows in full:

"An act to further the development and maintenance of an adequate and well-balanced American fishing industry, to promote the commerce of the United States, interstate, intrastate and internationally, to aid in the national defense, and for other purposes.

"Declaration of Policy—It is necessary for the national defense and in support of the development of its foreign and domestic commerce and to insure its supply of necessary high protein food for the diet of its citizens that the United States shall maintain and support a commercial fishing industry (a) sufficient to provide all of the high protein marine and fish food possible to acquire for its domestic consumers, (b) which shall adequately support an in-shore and high seas fishing fleet capable of serving as a naval and military auxiliary in time of war or national emergency, (c) with a fleet fit to serve as a far ranging, high seas information source in time of peace to the United States Navy and United States Coast Guard, (d) with its fishing fleets operated under the United States flag and owned by citizens and/or corporations of the United States insofar as may be practicable, (e) employing fleets to be composed of the best equipped, safest and most suitable type of vessels constructed in the United States and manned with trained and efficient citizen personnel, (f) and when necessary shall provide the management of all shore installations of this country, such as canneries, freezer plants, and/or processing plants of all kinds of fish and marine products, with encouragement and aid in every way possible in order that such installations may continue in a strong and prosperous manner processing for the domestic consumers of this country the much needed nutritious, and health-giving protein food of the sea, (g) with consideration being given at all times to the careful surveillance and immediate correction of legislation and/or regulations which might harmfully affect its healthy continuance. Therefore, and from this time on, it is hereby declared to be the policy of the United States to foster the development, encourage the maintenance and to further the prosperity of such a fishing industry."

• Mr. Loker's proposed approach to the legislative problem of the fisheries is not that of a politician. It reflects the very wide experience of a member of the industry who has had unusual opportunity for understanding the workings of Washington. He is the immediate past president of the California Fish Canners Association, a member of the American Fisheries Advisory Committee; a member of the Standing Committee on Finance and Administration of the International North Pacific Fisheries Commission and holds and has held numerous other responsibilities of trust for the American fishing industry.

Step-Up in 1956 Alaska Herring Activities Likely

• Herring abundance comeback in Southeast Alaska will permit 1956 increase of the regional quota by 40% over 1955, to 140,000 bbls.

This is in spite of the vigorous insistence of Southeast Alaska trollers that herring fishing for reduction purposes be forbidden or sharply curtailed.

In order to protect the important and resurgent Sitka herring population, the 1956 regulations limit the take there to 50,000 bbls. Two small but productive areas—Silver Bay near Sitka, and Fish Egg Island, near Craig—are opened to fishing for bait purposes only, with the catch limited to 125 tons in each.

• Herring regulations for the Kodiak Island and Prince William Sound areas remain unchanged, encouraging the resumption of herring operations in the Kodiak district and extension in Prince William waters.

Signs of herring in abundance were reported by salmon fishermen in the Shelikof Strait waters last season, with the fish large as well as plentiful. This evidence of reappearance of the important Kodiak herring population after some years of virtual blank is expected to reactivate some of the Kodiak herring plants this season.

• Fish and Wildlife Service plans herring studies during the next few years seek to lay a foundation knowledge and of historical and current information which will permit regulation on a more certain basis than in the past.

In particular, the Service proposes for 1956 will prepare the stage for further research to test the effects of fishing on the conservation of Alaska herring by setting aside the Juneau herring population for study purposes. Purse seining of these fish, except for bait, will be prohibited.

At the same time the Service is allowing limited fishing on the Sitka, Craig, and Ketchikan herring stocks. Careful studies of spawning and population growth will point up the effects on the fishery.

The five-year study program will be carried out with the active participation of herring fishermen, Alaska salmon trollers, and herring bait fishermen. By the end of that time, the southeastern Alaska herring catch should be on a maximum sustained yield basis.

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What Van Camp and B. C. Packers Plan for

Coast Oyster Co

• When Van Camp Sea Food Co. and British Columbia Packers, Ltd., acquired a substantial interest in Coast Oyster Co. recently there was considerable speculation in the industry as to how the U.S. and Canadian companies would participate.

This is how the deal works out, on the marketing level:

Van Camp has exclusive rights to all canned products of Coast Oyster Co.

B.C. Packers has exclusive rights to all the fresh and frozen products, with an additional option to deliver some of the Coast Oyster Co. production in bulk to Canada for canning or use in canned oyster stew and sale under the *Clover Leaf* brand label. Such oysters would be shipped to Canada in 5 or 10-gallon containers by truck and processed at B.C. Packers' big Imperial plant at Steveston, at the mouth of the Fraser River.

B.C. Packers' Pete Sunderland spent several weeks in California recently exploring processing and sales possibilities for new fresh and frozen products. He is head of the technical department at Imperial.

Supported by the two big companies mentioned, Coast Oyster Co. is planning extensive expansion and with a production greatly increased there will, of course, be a need for a much wider and more intensive campaign to promote the sale of oysters in various forms, such as oyster sticks and other specialties.

Verne Hayes, chief operating executive of Coast Oyster Co., with headquarters in South Bend, Wash., has been in Japan arranging for the purcase and delivery of some 100,000 cases of oyster seed. This is the biggest single order ever placed for the Pacific coast and it represents about 50% of the entire import to this area from Japan this season.

The company is building a fine new plant at Eureka, and extensive new acreage to be seeded to oysters is being opened up this year, notably at Tillamook Bay, Oregon, and Humboldt Bay, Drake's Bay, Bolinas Bay and Morro Bay, California. Last year the company produced about 400,000 gallons of oysters from existing faci ties, and this should be greatly e ceeded when the new acreage is production. In fact, Coast Oyster C is laying its plans to produce a market a pack at least two or thr times as great as the previous avera

The company plans to contin importing seed from Japan and h no intention of developing breedi stock in Pacific coast waters in ad tion to what it may already have. has been found that owing to te perature variations and other con tions and the difficulty encounter in separating various age groups th oyster breeding here is simply worth the effort, and certainly while it is possible to bring in ad quate supplies from Japan. Oys seed is usually loaded as extra ca on the top deck of Japanese freight and is thus entitled to a special ra The ships pick up the shipments cl to the breeding grounds and can liver them close to the beds here.

A. Caito To Head Calif. Seafood Institute

The annual meeting of the Northern California Seafood Institute took the form of a dinner dance last month for members and guests and their ladies, at Sabella's on Fishermen's Wharf, San Francisco.

Lionel Shatz, A. Paladini, Inc., vice-president of the group, presided at the meeting which was attended by about 45 couples. A. Caito, Western California Fish Co., San Francisco, was elected president; Mr. Shatz, re-elected vice-president; Tom Lazio, Tom Lazio Fish Co., Eureka, vice-president; and J. C. Tarantino, Bell Smoked Fish Co., San Francisco, was re-elected secretary-treasurer.

The board of directors includes the above and also Joe Balestrieri, Joe Balestrieri & Co., San Francisco; Guido DiPiano, Central Fish Co., Oakland; Neil Taylor, Norfish Sales Co., Oakland; Lloyd Turnacliff, Meredith Fish Co., Sacramento; and Vince Davi, Davi Fisheries, Pittsburg.

Speaker of the evening was Jack Gilchrist, legislative representative of the group, who told of his activities during the last session of the legislature in Sacrament W. G. Swanson Co., San Francisc food broker, was welcomed as a ne member.

Aureomycin Tuna Tests Conducted by Japanese

Experimental use of aureomycin for the protection of quality of tuna held in ice aboard the fishing vessel is being tried in Japan under the sponsorship of Lederle (Japan) Ltd., an affiliate of Lederle Laboratories and American Cyanamid Corporation.

The tests are being directed by Professor Toyama of Kyushu University, who asked Yamaguchi-ken Gyogyo Kosha, incorporated by the coastal fisheries cooperatives of Yamaguchi Prefecture, to perform the experiment aboard two of its newly-built tuna clippers. These are the vessels *Bocho Maru Nos.* 1 and 2.

The vessels are using ice made with 3 gr. of aureomycin per ton for packing tuna, and will compare the landed quality with that of fish from the same catches carried in untreated ice.

Another experiment carried-out on the same vessel involves injecting a solution of the antibiotic in water into the visceral cavity of the fish.

The tests are being made in the course of a fishing trip to the Ind Ocean.

Taiyo Gyogyo's laboratory at S monoseki is also experimenting w the antibiotic.

Metlakatla Harbor Project Calls for Bids

Mayor John Smith asserts that proval of the new Metlakatla har project would switch the town's ec omy from its cannery, which re on fish traps for the quantity of mon needed, to emphasize on se and troller-caught fish. Bids on harbor were called in January. cost is estimated at $370,000.

Faced with the eventuality that seven traps owned by the town be outlawed in accordance with oft-expressed wishes of the peo the town council has been attemp to interest more fishermen in mak the big step toward owning the la boats by helping with their financ The new small boat harbor will vide the first good shelter for fleet the town has ever had. B currently are at the mercy of the ments and damage runs high thro the winter.

Stabilized*

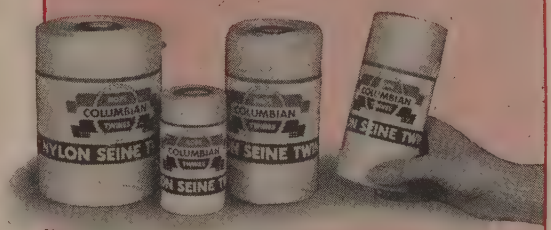
Nylon or Dacron by COLUMBIAN

. . . pioneers of non-raveling cordage!

You can splice and knot Columbian seine twine and rope without losing an inch due to ravelling! Even after months of continuous fishing in fresh or salt water, you'll find no fluffing or untwisting . . . no unlaying of strands. That's because Columbian's exclusive "Stabilization" process makes yarns and strands of nylon or dacron "stay put" — for the life of the rope!

Columbian "Stabilized" Nylon can be furnished in either Filament or Spun construction. Dacron is recommended in the Spun form. Columbian's long experience with both synthetic and Manila fibres has developed a complete selection of the ropes and twines best suited to any fisherman's needs.

Diameters from 3/16" up to 3/4" on wooden reels in easy-to-handle Colpack cartons. Larger sizes up to 2 1/8" on wooden reels to full coil and half coil lengths.



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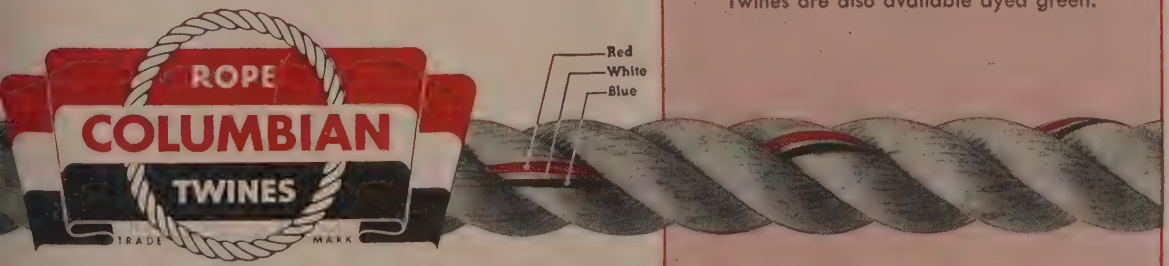

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Now you can say "good-by" to cumbersome diving equipment and still make vital underwater repairs hundreds of miles from port. Just check out a good swimmer in your crew on the use of the Northill Air-Lung. It's the best insurance you can have against the possibility of fouled anchors, fouled nets and damage below the waterline.

The Northill Air-Lung is scientifically engineered for maximum freedom, ease of breathing and safety under water. It requires practically no servicing. A swimmer can have it on and be over the side in minutes . . . can stay below about an hour for every air cylinder he carries . . . can make necessary repairs working with complete freedom. Every fishing boat should carry one as well as a Northill anchor.

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1—Special galvanizing that gives every wire in the rope absolutely top resistance to corrosion.

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And besides Preformed Special Galvanized, ther Roebling wire rope that will give you top efficiency and run economy for standing rigging and every other se Call your distributor or the nearest Roebling office. are listed in the yellow pages. John A. Roebling's Sons poration, Trenton 2, N. J.

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ackerel and Anchovy inter Canning Active

The production of anchovies in Jan-y was considerably higher in South- California than in December; that Pacific mackerel was down and Jack about the same.

Pacific, 2,058 tons; Jack, 5,178; an-ovy, 1,743. Pacific tonnage resulted 59,453 cases of one pound talls and l cases of five ounce round 100s. k fishing produced 4,600 cases of e pound ovals, 81,844 cases of one und talls and 3,080 cases of five nce round 100s. Anchovies were ned this way: 1,652 cases of one und ovals, and 46,747 five ounce nds.

The pack of tuna specialty packs, ch as tuna and noodles, fell in Jan-ry from December case production, ,449 cases as compared to 13,873 ses.

nkerton Studies Pallets

James Pinkerton, manager of the etchikan Cold Storage, spent a week Seattle early in March, discussing e forthcoming halibut season with hermen and operators; and also in udying the pallet baskets being em-oyed in handling frozen fish at the ort of Seattle cold storage.

He reported that the Ketchikan plant had gotten 1,750,000 lbs. of first class bait herring frozen. The bait is frozen in 50-lb. cases, and these are stacked 20 to a pallet. Pallets are stored two-high, so a fork truck can pick up a convenient one-ton unit.

Mr. Pinkerton expects further development of Ketchikan's crab business this season.

Richard J. Gosse, Canadian Fishing Executive, Dies

Richard J. Gosse, 62, formerly an executive of several companies in the British Columbia fishing industry and member of a family which for generations had played a prominent part in that business, died suddenly in Vancouver, where he had been born.

Son of the late Richard Edward Gosse, one of the founders of B.C. Packers, Ltd., Dick Gosse was a graduate of the University of Toronto, and after completing his education and war service became cannery manager at Bella Bella for the old Gosse, Millerd Packing Co., remaining in that post from 1918 to 1926, when he became production manager for the Gosse organization, then operating several canneries. Soon after the organization of B.C. Packers, which took over the canneries of several independent companies in 1928, Mr. Gosse became managing director, a position which he retained until 1931, when he left Canada to make his home in the U.S.

Returning to British Columbia in 1946, Mr. Gosse entered the cold storage business and became managing director of the B.C. Ice & Cold Storage Ltd. In 1954 he resigned from that company to organize Trans-Canada Freezers, Ltd., a company engaged in installing freezer plants on the prairies, and at the time of his death he was also president of Gosse Consultants, Ltd., which provided an engineering service for ice plants.

Alaska Fishermen's Union Re-elects Geo. Johansen

Certainty of re-election of George Johansen and Swan Lundmark, respectively secretary-treasurer and assistant, resulted when Alaska Fishermen's Union nominations closed with no other candidates for these top offices.

The new term will be Johansen's sixth and Lundmark's fifth.

In Portland voting Martin Olsen, agent, was opposed by Swan Ohman and Oscar Rodin. Abe Lehto was unopposed at San Francisco and Jack Wood at Bellingham.

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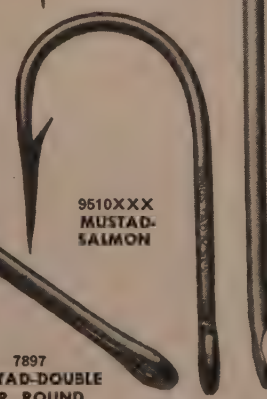

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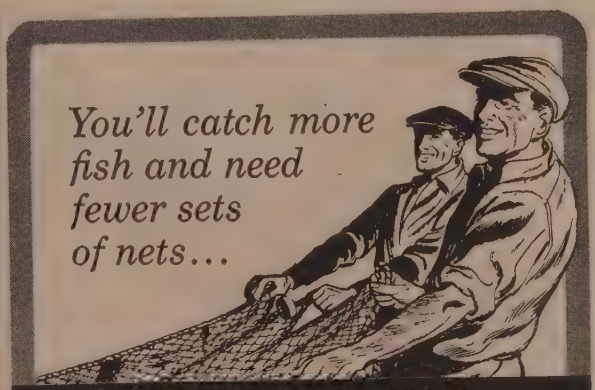

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ON THE PACIFIC COAST

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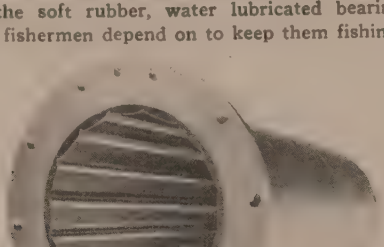

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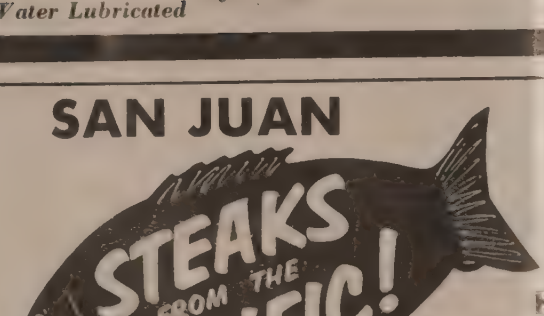

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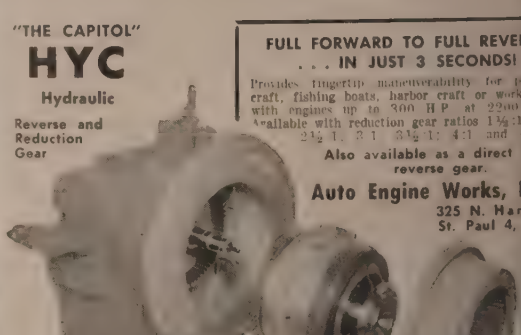

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OOD FISH
IARKETING
ction of PACIFIC FISHERMAN--

News and Views of National Trade in Fish and Shellfish

April, 1956

o Talls; a Few Cohoes; Dab of Reds -- That's It

Canned salmon in tall cans was ally unavailable on the primary ket with half of Lent still to run. his statement applied to all spe- *Talls were out.*

here were some halves offered— w, but with no quantity of any equence. Obviously, a somewhat large percentage of the 1955 ed salmon pack was put into es. Packers were following the l manifest in recent years—to- l halves; but the scant quantity sh available for packing made it to over-run the dictates of reality. owwhere, save on Kodiak Island, there sufficient pressure of 1955 eries to make it *necessary* to pack lls.

ohoes — of which the American in all districts was only 201,000 —were a bit draggy. The talls gone, and probably the 4-lb. but there were halves to be had.

The lack of interest on Medium Reds probably accounted in large degree for the lack of success which attended Japanese efforts to sell their 1955 pack of this species.

A month ago these pages reported renewal of a drive by the Japanese to clean-up the 120,000 cases of Coho halves still on hand. At time of writing reports of any significant shipments had not been received.

• Japanese Red halves were being offered anew by American importers at mid-Lent, quoted at $20 for 48s, fob. Pacific Coast.

Reappearance of these goods evidently resulted from the disappointment of the Japanese over the amount of salmon actually purchased by Great Britain. The actual shipping orders fell somewhat short of permit predictions, with the result that moderate quantities of Red halves became available.

arge Lenten Sales Cut . S. Inventory of Tuna

alifornia's canned tuna pack for ary fell below that of December, ly because of the fact that can- was accelerated in the last month 955 due to the end of the two- th-long cannery workers strike. of the tuna fleet was on the high in January and several canneries closed during February for re- in anticipation of the return of of the boats in March.

he case pack in January was 853,- as opposed to more than a million in December. Sales were run- ahead of the Lenten season last inventory of canned tuna was n. In some areas the price of tuna firming, according to the report he Terminal Island canner. There general agreement that tuna mar- g was in a more healthy state than is time last year.

However, the industry was facing terrific competition from heavy advertising and selling of meat and meat products, even during the Lenten season in the Los Angeles area, one of the largest food-consuming regions in the country.

For the most part, in newspaper "leader" advertising by grocery chains chunk, light meat, was featured at 29c. In one case one label was advertised as low as 19c and another label was being sold at 33c. The new *Dominator* label (packed by South Coast, Terminal Island, for the owner of the tuna clipper *Dominator*) was noted at 29c for chunk and 19c for grated. Alpha Beta, large Southern California chain in the Lenten season was advertising "non-oily" pack of bonito flakes for 10c. This, of course, is an imported brine pack.

SEATTLE MARKET

Prices openly quoted in Seattle at presstime for good quality stocks, fob. Pacific terminals, cases of 48. Some items in nominal supply. All prices subject to prior sale; confirmation essential.

	Per case
Alaska Salmon	
Sockeye, halves	$20.00
Pink, halves	12.50-14.50
Coho, talls	28.00
Coho, halves	15.50-16.00
Coho, quarters	9.50
Chum, halves	11.50
Puget Sound Salmon	
Sockeye, halves	$20.00-22.00
Coho, talls	28.00
Coho, halves	16.00
Coho, quarters	9.50
Pink, halves	12.50-13.50
Chum, halves	11.50

Bagged Brine-Frozen Crab in Good Demand

Brine-frozen crabs packed in polyethylene bags are finding a ready demand in Eastern markets as well as on the Pacific Coast, according to those long enough in the field to sense its trend.

They feel that the new protective pack has broadened the market base for Pacific crab and greatly expanded the potential for selling frozen crab in the shell.

Companies known to be marketing bagged crab in this form include: Ivar Wendt, Whitney & Co., Whiz Fish Products Co., Booth Fisheries Corporation and San Juan Fishing & Packing Co.

Philippines Raise Duty

Fishery products entering the Philippines now pay duty increased by 30%. American goods continue to enjoy preferential treatment to the extent that they still pay only 25% of the duty charged on the products of other countries; but the duty paid by U. S. goods rises 30% under the new order.

Thus in future sardines from other countries will pay 19.5% ad valorem; and those from the United States 4.875%.

The 175% special import tax continues in effect unchanged. It applies to all fishery products except sardines.

Mild-Cure Worries Cured By Active Smoker Demand

• Marketing of the unusually large 1955 pack of mild cured salmon to mid-spring had progressed at a pace and with an evenness beyond the best hopes of a few months ago.

Then the men responsible for selling the mild cure pack were definitely fearful. With the biggest pack in 10 years, 3,400 tierces over that of 1954, the sellers' problems promised trouble.

However, by the time trolling boats were being rigged for the 1956 season the pack had moved into smokers' hands in a manner which generated confidence.

Part of this strength probably lay in the generally limited stocks of frozen salmon, on which the smoking trade has come to rely more and more in recent years.

Silvers and Falls in particular were extremely short in the freezers, and this put more demand on Kings for the frozen trade. Obviously, this left less frozen suitable for smoking, which diverted demand to tierces stock.

No one so bold or optimistic as to feel there would be no unsold carryover; but it was not expected to prove critical.

That seems to be a fair re-pack of the mild cure situation at presstime.

• *SOUTHERN* smoking has contributed substantially to the consumption of mild cured salmon in recent months —not that it hasn't been an important factor in the past as well.

However, the rise of smoking in Florida has helped volumewise; just as the build-up in Southern California some years ago made the Los Angeles area one of the primary fish smoking centers in the United States.

In Miami the Florida Smoked Fish Co. has been handling a large volume of business, using mild cured salmon in important quantity. This development stems of course from the lar number of Jewish people visiting Flo ida during the resort season; a also the generally high-income level the tourist throngs, as well as the tired resident population of the Flori cities.

In Los Angeles Louie Vitale's L Angeles Smoking & Curing Co. grown with the years until today is one of the largest—some say largest—salmon smokers in the Unit States; with its sliced smoked salm selling in the metropolitan centers the Atlantic Coast as well as of Pacific.

Up-grading of the demand smoked fish specialties seems to low when production follows ability-to-buy.

Fish Divoteers April 27

Ralph Syverson, of the San Ju Fishing & Packing Co., new presid of The Fish Divoteers, has announ that the organization's 18th ann spring golf tournament will be h Friday, April 27, at the Rainier C & Country Club in Seattle.

Why Uncle Has Trouble Buying Salmo

• Armed Services want more canned salmon.

They were very unhappy over the fact that the Quartermaster Corps was able to get only 30,000 cases of canned salmon from the 1955 pack.

This was only about one-third the amount wanted.

This was indicated to the salmon industry by the QMC at a late February meeting.

• Something of the "why" respon- sible for the difficulty found by Armed Forces was spelled-out to worried officers. It included po like these, couched in more comp hensive and perhaps more diplom language:

1. Armed Forces requireme should be made known before salmon arrives from Alaska.

2. Special requirements as to m ing should be made known in vance of packing.

3. A competent civilian inspe present at the NCA laboratory exa nations should certify lots as acc able for QMC purchase.

4. Insistence on 1-lb. talls ha caps purchasing. Halves and cans should be considered.

5. Sales are discouraged by in ence upon specific quantities by number.

There were a number of o reasons; and all seemed sound.

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apan Crab Exporters Plan tensified Sales Effort

pecting an export-grade canned pack of about 770,000 cases of alves in 1956, the Japan Export Manufacturers Association is eting $120,000 to $130,000 éxiture for advertising and market opment in the United States. is at least double the 1955 exiture of about $60,000 for proon in the American market.

e market development fund will ivided between direct consumer rtising by the association and int advertising allowances through ng firms.

e canned crab target for 1956 is nder 1,000,000 cases of 48 halves, species segregation of the export- as follows:

ecies	Cases
, ocean pack	400,000
, land pack	100,000
y Crab	250,000
saki Crab	15,000
i Crab	5,000
tal	770,000

LES POLICY — Last year the n Canned Crab Sales Co. successmarketed 150,000 cases of Hairy through Peabody of England; it is understood that the contract ing renewed for sales in 1956. it is anticipated that a substanportion of this species shown in able above will be offered to the United Kingdom.

In view of the success of the Hairy Crab sales in England last year, and in an effort to stabilize the export of this variety to the United States, the company this spring announced a new sales policy for this species in the American market.

Lump sum bids are being invited from American traders on an initial offering of 50,000 cases. Bids to be considered must not be less than the current floor price of $12.65, labeled, fob. Yokohama for choice grade, shipments 10,000 cases monthly from March to July. The offering will include a few cases of standard grade, for which the floor is $11.15.

The sale will be made by the sales company, but the actual shipping will be in the hands of the Japanese trading firms designated by the United States importer whose bid is accepted.

Following consummation of this trading, it is anticipated that another 50,000 cases may be offered.

• *KING CRAB*—The Japan Canned Crab Co. is quite optimistic over the export sales prospects for King crab, despite the expected increase in production. They base this optimism on the fact that in former years the United States market absorbed far greater quantities of King crab annually than even the expected expanded pack anticipated in 1956.

California Canned Tuna Pack — January, 1956

Meat	Solid Pack	Standard Pack	Chunks	Grated, Flakes	Dark & Light	Tonno	*Misc.	Total
b.	...	...	75	...	...	...	...	75
lb.	98,472	1,453	17,404	22,751	1,155	...	...	141,235
lb.	12,487	...	498	...	...	...	...	12,985
lb.	...	...	...	...	...	...	1,059	1,059
in ½ lbs.	...	...	...	...	...	...	...	**148,937**
Meat								
. (12s)	...	...	2,083	...	...	...	...	2,083
.	44	101	1,390	283	...	...	...	1,818
lb.	157,503	9,736	396,087	81,484	1,700	10,456	...	656,966
lb.	17,556	1,339	20,619	...	...	†9,693	...	49,207
lb.	...	...	...	...	...	...	9,390	9,390
in ½ lbs.	...	...	...	...	...	...	...	**703,609**
lb.	...	...	...	497	...	...	...	497
in ½ lbs.	...	...	...	...	...	...	...	**497**
S	286,062	12,629	438,156	105,015	2,855	9,693	10,449	‡853,043

a specialty packs converted to ½ lbs.
lb. 100s.
al case pack converted to ½ lbs.

Frohmans Add Canadian "10 Knot" Fillet Line

Their appointment as Chicago and Middle Western exclusive sales agents for National Sea Product's, Ltd., "Ten Knot" line of Atlantic fillets and other fish products is announced by L. H. Frohman & Sons, Chicago sales agents for fish and sea foods.

This fills out a notable line which already includes the Pacific frozen fish products of New England Fish Co. and The Canadian Fish Co., as well as "Crest" shrimp from Mexico's Pacific coast.

8.8 Million Pounds Is Low-Duty Fillet Quota

The lower-rate fillet quota for 1956 has been figured by the Bureau of customs at 35,196,575 lbs. of frozen groundfish fillets. This figures 8,799,144 lbs. per quarter. When the imports during any quarter of the year rise above this quantity the tariff rate rises to 2½ cents per lb. from the 1⅞ cents for quantities within the quota.

The quota for the year is barely—0.7%—lower than in 1955.

Frozen fish constitute the main line of the A. R. Lantz Co., Inc., Los Angeles brokers and importers. Mr. Lantz is on the left of this staff picture. Reading to the right: Dave Cornman, Herb McBride, Gus Vellis and Joe Kollar.

Fixed Halibut Catch Vital To Stability, Says Dealer

● Specific knowledge of the amount of halibut to be handled in the course of any one year is the key to stability and economic well-being in that business, according to L. C. Berg, Sitka fish dealer, who writes to comment on *Pacific Fisherman's* February editorial "Halibut Industry Seeking Stability Through Quality".

Mr. Berg writes:

"I am in agreement with the thinking that quality is essential in marketing any variety of frozen fish. This should be stressed at all times, even though the cost is higher in carefully processing a superior quality frozen pack. I speak from years of experience.

"A superior quality pack of halibut *should* increase sales. But this did not seem to help market conditions and sales during the late season of 1954, when there was the largest catch of halibut in the history of the halibut fishery, over 70,795,000 pounds. This can be blamed on only *one* reason—over-production. The market was not able to absorb such a large volume of halibut at stable prices, and you know the results. Priced dropped, and all dealers sold at heavy losses rather than hold fish in storage, adding extra charges.

"All this can be remedied so fishermen and dealers will in the future have a stabilized, healthy market, their earnings improved and their losses prevented.

"Allow me to suggest a solution to the problem, which would remedy this condition in the future. It is:

"Have the quotas on all areas increased within a reasonable margin, and all areas closed for the remain of the season when these quotas w caught, with no re-opening dates la This would make a shorter fish season for halibut fishermen, bu would definitely improve prices them, which would compensate the loss of the longer fishing ti

"Under present conditions, by opening areas later with unlim amounts to be caught, fish dea are cautious in paying high pr to fishermen, not knowing the volu that will be caught.

"If regulations as mentioned ab could be agreed upon by the In national Pacific Halibut Commiss I feel it would guarantee stability the halibut industry.

"This is my 44th year in the business, buying and processing but; and I can look back on s very unprofitable years for the fis men and dealers because of depre markets.

"We must not forget that an ac healthy market makes us all, fis men and dealers alike, prosperous let's hope for a better future fo concerned in the halibut industry"

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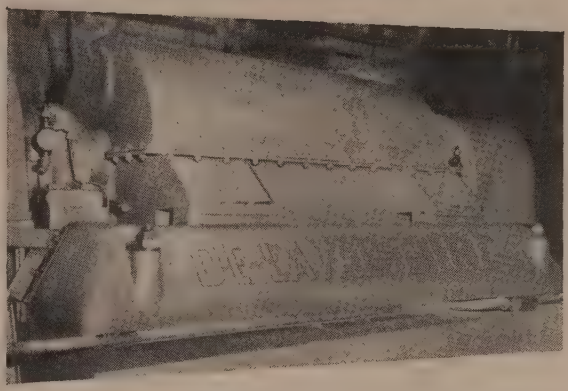

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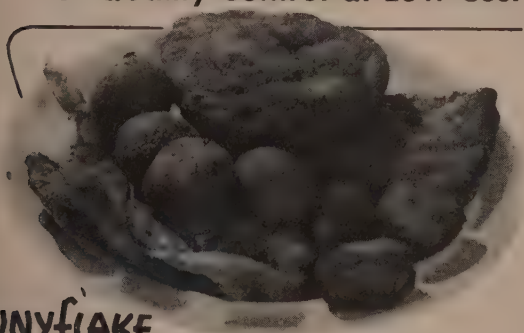

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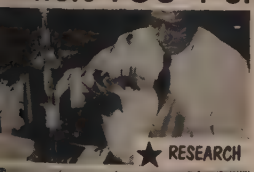
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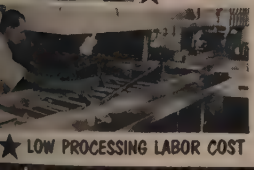
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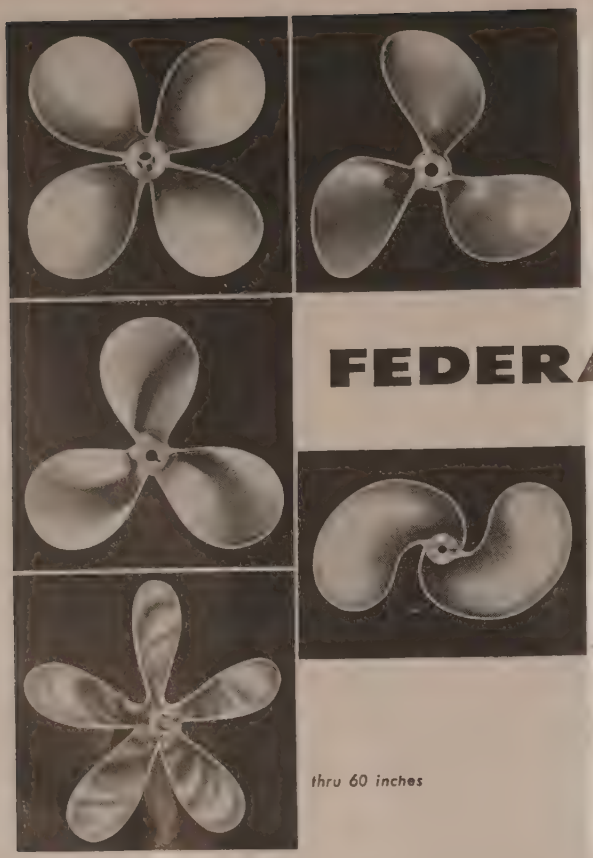

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en Thread Official its Pacific Headquarters

. H. K. Finlayson, Glasgow, Scot-, director of all manufacturing of Linen Thread Co., Inc., was a or recently at the San Francisco fic Coast headquarters of the com-. Mr. Finlayson conferred with ı E. Richardson, Pacific Coast ager, and his staff there after a it by air enroute to Scotland from tralia.

G. Quamma, Pioneer lif. Processor, Dies

he many friends of Edwin G. mma, 67, one of the pioneers in California fish processing business, e saddened to learn of his death month in San Francisco after a ıber of years of ill health.

Mr. Quamma started in the fish king business prior to 1917 with ı Camp Sea Foods, Inc., in San ro. Later he went to work for the fhill interests in Long Beach. In 9 he left San Pedro and built a cannery at Turtle Bay, Baja Cali-nia, and after that built canneries Ensenada, Cedros Island, and San as.

In 1935 he came to San Francisco and was superintendent of the floating reduction plant *Lansing*, one of the sardine reduction ships off the Golden Gate. When these ships were legislated out of action Mr. Quamma went to work as superintendent for the Farallone Packing Co., San Francisco. For many years, until ill health caused his retirement, he was superintendent of the Northern Packing Co., San Francisco.

He was a member of many fraternal organizations, and he leaves his wife, Alma, and a daughter, Mildred.

Columbia Winter Chinook Production Is Scant

Winter fishing closed on the Columbia River with February, production generally being rated "poor" by the fishermen. Estimates indicate that about 10% of the fishermen resident below Bonneville worked their gear during the winter.

Prices to the fishermen ranged from 55c down to 40 for Chinooks: with Steelheads commanding from 36c to 27.

The run was strongest at the close, with boats on their final delivery having as high as 400 lbs. in some instances.

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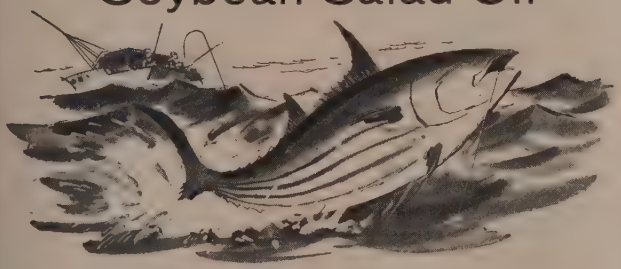

If you'll *taste—smell*—and *try* Archer "S" Soybean Salad Oil, you'll see why so many tuna processors are using it.

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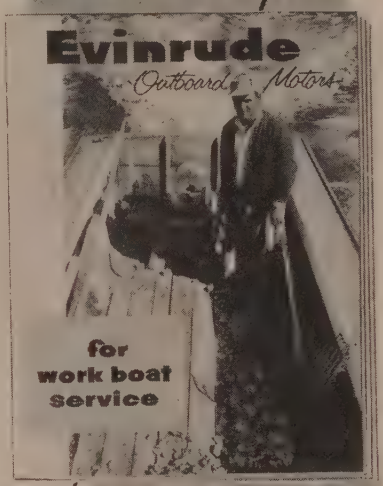

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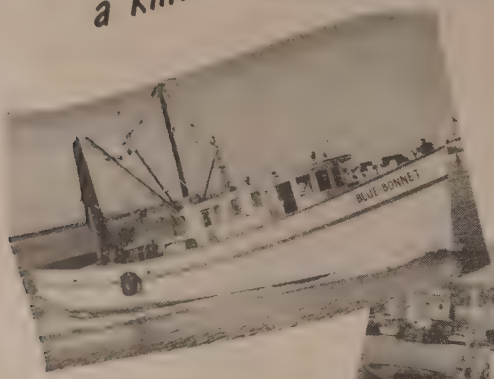

"BLUE BONNET," 73' shrimper owned by C. O. Robert, Aransas Pass, Texas. Snow-Nabstedt Model 3758/2057 4.5:1 Reduction Gear on Caterpillar D337 Marine Diesel.

"CYPRESS," 75' cannery tender owned by Fidalgo Island Packing Co., Seattle, Wash., Snow-Nabstedt Model 3764/2065 3:1 Reverse-Reduction Gear on Murphy 190 h.p. Marine Diesel.

"DEBBIE & JO-ANN," 78' scallop dragger owned by Moses Schonfeld of New York City. Snow-Nabstedt Model 3774/2075 3:1 Reduction Gear on Wolverine-Waukesha WM1905 Diesel.

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Sun Pacific Purchases Santa Barbara Freezers

Sun Pacific Inc., headed by J Crivello, San Diego, has purcha the Santa Barbara Frozen Foods Santa Barbara, custom processors frozen breaded fish sticks, fish ca etc. The company has also sold sumer packages of frozen seaf under its S T M label.

William Moseley continues on charge of sales and as vice presid

Andrew Sanfilippo, vice presider Sun Pacific Inc., is now stationed Santa Barbara and will represent new ownership.

Jack Crivello has been associate the tuna canning industry for m years in San Diego, first with Harbor Packing Co., then with merger of Westgate with Sun Har a merger which later became W gate-California Tuna Packing Some months ago, Mr. Crivello his freezer plant in that South Am ican port to Westgate-California, it was assumed that he had left fishing industry permanently. T most certainly represents a new p of activity for a man who has alw been a very competent executiv the canning and merchandising canned tuna.

Frozen Seafood Dinner

A new frozen seafood dinner. halibut as the principal item, is b produced by Fradelis Frozen F Corporation, Los Angeles. The but is grilled and packaged in Craft containers, with potatoes au tin and mixed vegetables. The Fr lis company also packages a fr fried shrimp dinner.

Trawler Gets High Powe

Gus Wandtke, superintendent, salito Shipbuilding Co., Sausa Calif., has repowered his tra *MacArthur* with a new Caterp 310 hp. turbocharged Model Series F marine diesel engine,' chased from the Thomas A. Co., San Francisco.

The new engine is equipped Cat designed and built hydraulic ine gears 4.4 - 1 reduction. Th stallation was made at Sausalito building Co. R. Enge, skipper o *MacArthur*, who has been on he some time, is also a part owne the craft.

Humboldt Fish Harbors

Small boat harbors on the boldt coast of California under sideration are Trinidad Bay, boldt Bay, and Shelter Cove. A tion for Trinidad already has presented.

home for Bendix-Marine, North Hollywood, Calif., housing Walter Rhea, head of the marine ɔn; Ken Marlin, sales, and other members of this division of Bendix Aviation Corporation. endix line of marine electronic equipment includes marine radar, automatic pilots, depth sounders, radiotelephones, radio direction finders and portable electric generators.

tinental Buys Calif. Site

L. Perin, executive vice president of inental Can Company's Metal Divi- announced that Continental has e arrangements with the Southern ic Company to acquire about 40 acres ndustrial property in San Leandro, ornia. for future development. e San Leandro property, he explained, make possible future expansion of ities for manufacture of metal con- ers. Definite plans will be forthcoming construction of new facilities which pected to commence in 1957.

M. Steed, newly appointed Cummins En- Co. regional manager, Southwest Region, offices in Los Angeles. Prior to his nt appointment, he was a regional rep- ntative, Central Region, with offices in ago. The Cummins Southwestern Region sists of the states of California, Arizona, and Nevada.

mpressed Gas Blows Horn Brooks Pressure Pack

rooks Equipment Co., 636 Potrero Ave., Francisco, Calif., has developed the oks Pressure Pack — carbon dioxide — vated horns for small boats, yachts, s, schools, oil fields, hangars, factories, d buildings, etc.

ne Pressure Pack utilizes the concen- ed power and energy of compressed on dioxide gas for the operation of npets, whistles, and horns.

rooks Pressure Packs come in three dels, and 10 sizes—from 2 to 100-lbs. net tents of carbon dioxide.

ight weight manual and remote control hanical models of Pressure Pack with variety of single and multiple horns are ideal for fish boats, tugs, and pleasure craft. Pressure Packs are said to provide the most inexpensive, dependable, and compact source of pressure for operating such horns, trumpets, and whistles, and are easy to install and maintain.

Sperry's San Diego Shifts

Newly appointed area supervisor of Sperry Gyroscope's San Diego office is Glenn E. Cook. Dexter Hayhurst continues primarily in marine sales and service. Alfred E. DeVuyst is now on the Sperry staff, concentrating on marine repairs, and Earl Lakin has been transferred from the San Diego office of Sperry to the Wilmington office.

Power Block Agents Named In California and Canada

Marine Construction and Design Co. has recently announced the appointment of Fishermen's Cooperative Association, Fisherman's Wharf, Pier 78, San Pedro, Calif., as their southern California sales repre-

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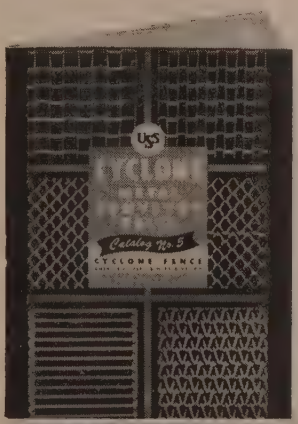

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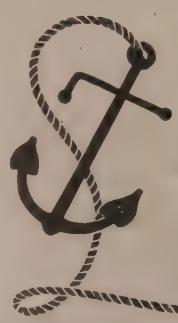

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t, thus eliminating drag and other
water disturbances which are caused by hit-or-miss methods of attaching chunks of zinc of unknown quality to various underwater parts. 3. Inhibitors can be electrically connected one to another to insure adequate sacrificial material is present, to protect all parts otherwise affected. Complete details will be found in the Michigan Wheel Inboard Catalog, a copy of which is offered, free of charge, to those requesting it from Michigan dealers or by writing to the factory at Grand Rapids, Michigan.

Mathers Headquarters Moved

Mathers Supply Co., Seattle manufacturers of Mathers remote controls, and distributors of Double Seal piston rings, have moved into new headquarters at the Fishermen's Terminal, Seattle. The Mathers telephone number there is GArfield 1520.

Continental Can Executives Win Pacific Coast Posts

In a reorganization of personnel in the Metal Division of Continental Can Company, necessitated by substantial sales increases and recent retirements, staff changes, effective March 1, announced by Reubin L. Perin, executive vice president of the division, include in the Pacific division, C. F. Marquard, previously manager of production engineering for the Central division, named general manager of the south Pacific district, San Francisco; J. W. Broomhead, heretofore manager at Pittsburgh, becomes general manager of the north Pacific district, Portland, Ore.

The reorganization was caused primarily by the huge volume of increased metal container sales achieved by Continental in the past few years, and the recent retirements of Hans A. Eggerss, former president, and Sherlock McKewen, former vice president of the Pacific Metal Division.

Donald E. DuChane is a new marine sales representative for Pacific Division, Bendix Aviation Corporation, under Walter P. Rhea, manager, Marine Department. As a member of the sales staff, Mr. DuChane will contact dealers on sales and service of Bendix Marine Products in Southern California.

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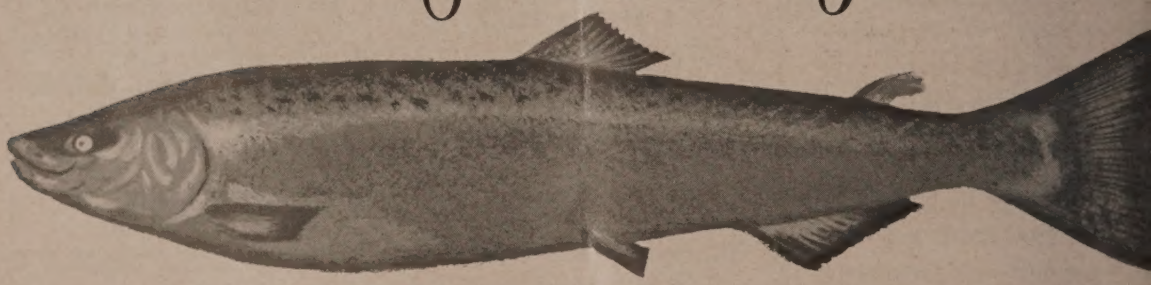
It takes TUBBS ropes to bring in the big ones



the fishing rope with extra muscle

Large or small, your catch won't get away when you use tough, dependable Tubbs Rope. Tubbs Extra Superior Manila is made from top grades of pure manila fiber, carefully selected and blended for extra strength and longer working life. Special lubrication and water repellency treatments make it flexible and easy to handle under the roughest fishing conditions. Choose Extra Superior Manila and you'll have extra muscle to protect your catch.

For free copy of booklet "Selection, Use and Care of Rope," write Dept. FP-4

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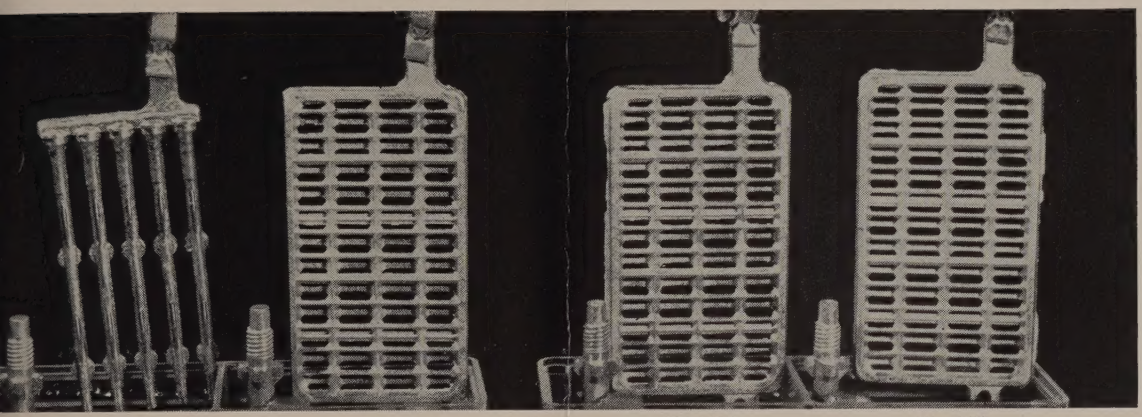
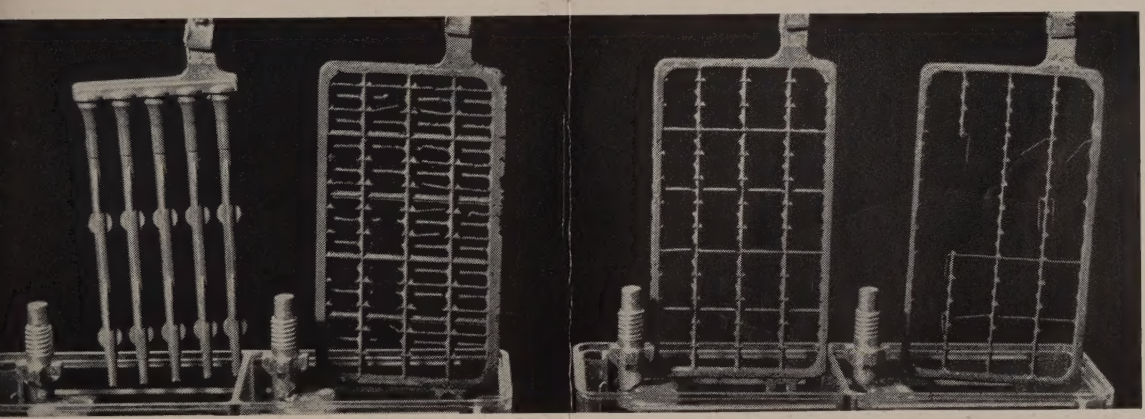
XIDE-IRONCLAD BATTERIES

For all marine applications

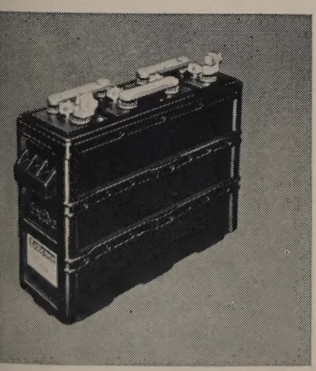


EFORE: Silvium alloy | Alloy "A" | Alloy "B" | Alloy "C"



FTER: Note how the Silvium grid resisted corrosion. Compare it with the other alloys.

Corrosion resistant SILVIUM prolongs battery life



Y FOR MARINE SERVICE. Model MV-D. Fa-or reliability, Exide-Ironclad Batteries are lly at home in marine applications. When ncies occur, Ironclad batteries deliver power t continuing demands for long periods. construction of positive plate retards flak-ures long battery life. Write for Bulletin 5190.

Reaching down deep into every Exide-Ironclad Battery are the fingers of Silvium alloy metal which form the grids of the famous Exide-Ironclad positive plates.

Silvium is a special alloy developed by Exide to resist corrosion and thus prolong battery life. For proof, Exide research engineers compared the performance of an Ironclad Silvium grid side by side with ordinary grids of other lead alloys. As the photographs above show, only Silvium came through the test without damaging corrosion—undiminished in size, unimpaired in strength. The other grids showed from moderate to severe corrosion.

Tests have proved that Silvium is not only more resistant to corrosion, but also a better conductor of electricity. Hence it both prolongs battery life and —because there's less internal battery resistance—more readily permits heavy drafts of power.

This special material is only one of the many exclusive features which have made Exide-Ironclad Batteries world famous for high capacity and long life. When you order batteries for heavy duty applications, or the equipment requiring such batteries, be sure to specify Exide-Ironclad. Write for detailed bulletin. Exide Industrial Division, The Electric Storage Battery Company, Phila. 2, Pa.

Exide®

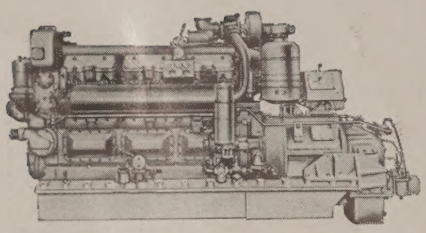
Caterpillar announces a TURBOCHARGED

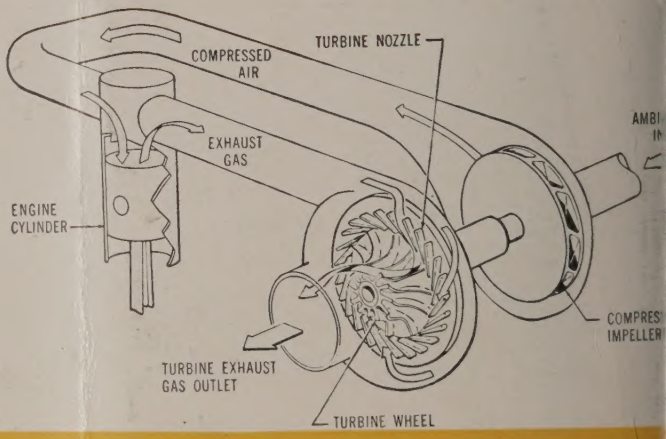
D397 (SERIES D) 650 HP Maximum @ 1300 RPM

AND

D375 (SERIES D) 430 HP Maximum @ 1300 RPM

Compact, modern heavy-duty marine diesels for greater power, efficiency and economy





The Cat D397 Turbocharged Engine

Both the D397 and the D375 are also available as *roots blown* and *naturally aspirated* engines.

The Turbocharger . . . Exhaust Gas and Air Flow

Another example of Caterpillar leadership in action! The Turbocharger, driven by the engine exhaust, utilizes energy which would otherwise be lost. It packs air into the engine according to engine *load*.

As shown in the diagram above, engine exhaust gases turn a turbine, which drives the compressor . . . the compressed air then enters the cylinders. Final result: more power on less fuel.

More than eighteen years of research have gone into these two new CAT* Turbocharged Diesels. Incorporating metallurgical, mechanical and aerodynamic advances, they are engineered to deliver higher horsepowers and lower operating costs at reduced noise levels. Their advance-design features are also available in D397 and D375 Electric Sets.

With these engines in the Caterpillar line-up, you now have an even wider choice of compact, modern heavy-duty power to meet your requirements. Get the complete facts about these two new diesels from your Caterpillar Dealer.

Caterpillar Tractor Co., San Francisco, Calif.; Peoria, Ill., U.S.A.

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MODERN HEAVY-DUTY MARINE DIESELS